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ABSTRACT

An analysis is presented of a review of research reports on the efficacy of direct instruction in fostering basic skills development. The review process began with a topical literature search using the ERIC database and conventional library methods. Articles and other documents were analyzed and abstracted into "Item Reports." Each of the items was judged against a set of pre-established criteria and ranked on a five-point scale. The collection of Item Reports was examined to identify issues which could be stated as hypotheses. Each hypothesis became the subject of a "Decision Display." The Decision Displays were created by sorting the Item Reports into those which supported or negated the hypothesis. A Summary Report was then generated from consideration of the Decision Displays and the file of Item Reports. For this analysis, 33 relevant documents were selected for examination, from which four hypotheses emerged: (1) Use of the Distar (Direct Instruction System for Teaching and Remediation) programs with disadvantaged, primary level children has a positive effect on basic skills achievement and affective development; (2) Use of the teaching strategies and behaviors collectively termed "direct instruction" has a positive effect on the basic skills achievement of primary and upper elementary school children; (3) Higher achievement results when skills and concepts are taught directly than when they are presented indirectly or not at all; and (4) Direct instruction is inappropriate for some educational settings, especially those involving older students and learning activities beyond basic skills development. The research documents strongly supported these hypotheses. This report includes the Item Reports on the 33 documents, the Decision Displays justifying the formation of the hypotheses, and an interpretive summary of findings. Recommendations are offered based on the findings and conclusions. (JD)

ED214909

Topic Summary Report

DIRECT INSTRUCTION

Research on School Effectiveness Project

Prepared for:

Alaska Department of Education
Office of Planning and Research

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PREFACE

This report is one of several in a series of reviews of research literature conducted for the Alaska School Effectiveness Project. Each of the reports addresses a topic which is deemed to have an impact, actual or potential, on school effectiveness. All of the reports have been generated using the same general approach and a common reporting format.

The review process begins with a topical literature search using both computer-based ERIC and conventional library methods. Articles and other documents found are analyzed and abstracted into a brief form called an Item Report . Each of the items is then judged against a set of pre-established criteria and ranked on a five-point scale. The collection of Item Reports are then examined for purposes of identifying issues. These issues are stated in the form of hypotheses. Each hypothesis thus generated becomes the subject of a Decision Display. A Decision Display is created by sorting the Item Reports into those which support or negate the hypothesis, are inconclusive, are badly flawed, or are irrelevant. One or more Decision Displays are generated for each topic addressed. A Summary Report is then generated from the consideration of the Decision Displays and the file of Item Reports. Thus, each complete report in the series consists of a Summary Report which is backed up by one or more Decision Displays which in turn are supported by a file of Item Reports. This format was designed to accommodate those readers who might wish to delve into various depths of detail.

This report is not intended to represent the "final word" on the topic considered. Rather, it represents the analysis of a particular collection of research documents at this time. There may be other documents that were not found because of time or other limitations. There may be new research published tomorrow. This present report represents our best judgment of available information at this time. This format allows for modification and re-analysis as new information becomes available or old information is re-interpreted.

For a more complete description of the analysis process see William G. Savard, Procedures for Research on School Effectiveness Project, Northwest Regional Educational Laboratory, December 10, 1980.

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Authors: Kathleen Cotton and W.G. Savard
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Introduction

During the past two decades new educational programs for preschool and primary level children have proliferated. Many of these, such as the programs funded through Head Start and Follow Through, have been developed and implemented to help overcome the learning deficits that often accompany growing up in socioeconomically disadvantaged settings. These, together with other new programs for non-disadvantaged students and for older students, have been researched and evaluated to determine their efficacy in promoting basic skill achievement and other desirable educational attainments.

Another thread of recent research has involved studying the classroom behaviors of those teachers whose students achieve more than would be predicted based on pretest scores, socioeconomic status, handicaps, and so on. The focus of this research has been to determine what these teachers do that is special; what they do that enables their students to learn more than their counterparts in other classrooms.

These two kinds of inquiries have led to well-documented findings about what kinds of instructional strategies and teacher behaviors work best with disadvantaged and non-disadvantaged students at the preschool, primary and upper elementary levels.

In examining different instructional programs and the kinds of teacher behaviors they require or imply, two main approaches can be identified, especially as concerns the education of small children. One of these approaches proceeds from the conviction that young children will develop basic academic skills, creativity, and self-esteem if they are allowed

to learn inductively--to discover rules, facts and underlying principles from guided exposure to and experience with language, numbers, games, and so on. Programs posited on this notion contain activities which are designed to enable children to learn by inference via numerous guided contacts with program content. Often called "discovery learning," this approach has led to the development of programs which describe themselves as being "focused on building the child's responsibility for learning," as featuring "child-directed choices," and creating situations in which "children are encouraged to select and schedule their own activities."

The other major approach to educating young children proceeds from the notion that basic skills should be taught directly via structured, teacher-initiated activities which involve considerable drill and practice and a high level of teacher-student interaction. Program content is tied directly to skill development in reading, language arts and mathematics; and student-selected activities play only a small part in the learning program. Generally referred to as "direct instruction," this approach is utilized in many instructional programs for older, remedial students and for educable special education students, as well characterizing many programs for primary children.

Before looking at what the research says about the efficacy of this direct instruction method in fostering basic skill development, it is necessary to be aware that the term "direct instruction" is used in three different ways in the research literature. Each of these differs from the "discovery learning" approach, and might be viewed as representing three degrees of rigor in applying the direct instruction principles outlined above. These three applications are described in the following paragraphs.[1]

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[1]Mastery Learning, a concept and practice which is closely related to direct instruction, is addressed in another report in this series.

Direct Instruction System for Teaching and Remediation (Distar). The most rigorous application of direct instruction methods may be found in the Distar programs, whose development was carried out initially at the University of Illinois and later at the University of Oregon in Eugene. Intended primarily for use with disadvantaged children participating in the Follow Through program, these programs provide reading, language and arithmetic instruction via a model which features small student-teacher ratios; rapid, teacher-directed, small group instruction; positive reinforcement and immediate corrective feedback; and an extensive teacher training and student progress monitoring system. The Distar model involves the use of explicitly detailed lessons (scripts), a signal system for cueing students to respond, and the provision of reinforcers to stimulate motivation. The Distar model is based on the assumptions:

> (1) that all children can be taught; (2) that to 'catch up', low-performing students must be taught more, not less; and (3) that the task of teaching more requires a careful use of educational technology and of time.

Much of the literature on direct instruction is made up of studies and evaluations of the Distar model programs.

Direct Instruction as a Set of Teaching Behaviors. Many researchers and reviewers of research use the term direct instruction to refer to a set of teaching behaviors which have frequently been observed together in the classroom operations of highly successful teachers. Described in detail several years ago by one researcher and adopted as a meaningful concept by subsequent researchers and reviewers, direct instruction here refers to a teaching style in which:

> a great deal of time is spent on academic activities, with a predominance of seatwork using structured materials. Teacher and workbook questions are narrow and direct, usually with a single correct answer. Teachers...provide immediate feedback using praise and acknowledgment of student answers. Students work in groups supervised by the teacher, with little free time or unsupervised activity.

Direct instruction is also characterized by an animated and supportive approach on the part of the teacher. It can readily be seen that this approach differs radically from the "discovery" method. It is also describable as being a few degrees less formal than the extremely rigorous format of the Distar approach, in that teacher presentations are not necessarily scripted, transitions are not necessarily effected by means of a signal system, and so on.

Direct Instruction as Opposed to Indirect Instruction or to No Instruction. Finally, the literature on direct instruction includes studies and reviews in which that term is used to mean teaching something deliberately--addressing it "straight on," as it were--as opposed to presenting it only indirectly or not at all. Researchers have, for example, asked whether specific vocabulary instruction is preferable to learning vocabulary words inferentially through encountering them repeatedly in the context of stories read. Researchers and reviewers who use the term direct instruction in this way are not referring to any particular collection of teaching behaviors. Rather, they apply this term to virtually any teaching approach that involves putting the things to be learned directly before the student, and addressing these things straightforwardly, in contrast to a guided discovery method or to not presenting the material at all. As such, this may be viewed as the least rigorous form of direct instruction.

The research base on direct instruction is, thus, a very diverse one. For the present analysis, forty-two documents were selected for examination from a large computerized and manual search effort. Of these, nine reports were not included in the in-depth review process owing to poor design or other disqualifying factors.

Of the 33 valid and relevant documents, two were concerned with kindergarten children, ten with primary age children, seven with both primary and intermediate, nine with upper elementary, two with secondary, two with elementary and secondary and one with an unspecified age/grade level. Fourteen reports focused on students in general, and 13 focused on a particular category of students, such as the socioeconomically disadvantaged (13), educable special education students (4), and remedial upper elementary students (2). The single most common type of study had to do with disadvantaged primary level children.

Outcome areas in which student progress was measured included reading/language arts (11 reports), mathematics (2), several basic skill areas (11), a combination of achievement and affective measures (6), values (1), self-control (1) and self-concept (1).

As for the meaning intended by the term "direct instruction", eight of the documents reviewed had to do with the effects of the Distar model, 13 with direct instruction used to denote an agreed-upon set of teaching behaviors, and 12 with direct instruction used to mean most any instructional format in which the learning material is addressed directly rather than indirectly.

Findings

The analysis of studies and reviews on the Direct Instruction System for Teaching and Remediation (Distar) led immediately and, one might say, directly, to the hypothesis that use of Distar programs with disadvantaged, primary level chidren has a positive effect on the basic skill achievement and affective development of those children. All but one of the reports which were concerned with these programs support this hypothesis. Whether effectiveness of the Distar model was compared with that of other Follow

Through models, with non-Follow Through models or with no-intervention control groups, Distar students consistently outperformed comparison students in all basic skill areas. Data on use of these programs also indicate that they confer benefits upon student self-concept and attitudes toward school generally or toward particular school subjects. And while the present search and retrieval effort did not produce a great deal of data on the use of Distar programs with educable special education students, those reports which did address such use found the programs very effective for fostering basic skill development and IQ increases among these students.

As for the longer-term effects of disadvantaged students' participation in Distar programs, researchers have found that when the intensive and highly structured learning experiences offered by these programs are withdrawn, two things occur: Students maintain an achievement lead over socioeconomically comparable students who were not instructed with Distar in the primary grades, but they begin to fall behind their middle and upper class schoolmates and behind national norms. For this reason, some educators have advocated that these children continue to be offered the kind of tightly structured, interactive instruction provided by the Distar programs on into the intermediate grades.

The several studies and reviews which lent support to the hypothesis were of high quality and leave little doubt about the efficacy of the Distar model in promoting basic skill achievement among disadvantaged primary age students.[2]

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[2]It may be well to mention at this point that, while the Research on School Effectiveness Project is not usually in the business of reviewing particular educational programs, and certainly has no product advocacy role, a review of research on direct instruction would not be complete without including the findings which have emerged from the research on the Distar model programs.

A second hypothesis emerging from the research examined is that use of the teaching strategies and behaviors collectively termed "direct instruction" has a positive effect on the basic skill achievement of primary and upper elementary level children. A great deal of well-designed research has been organized around this concept of direct instruction, and this research is virtually unanimous in its support of the hypothesis. Because so many different kinds of studies lend support to this hypothesis, quoting directly from some of them might provide the best sense of the efficacy of this instructional approach. In one large-scale review, for example, "teachers who most successfully promoted achievement gain...approached the subject matter in a direct, businesslike way, organized learning around questions they posed, and occupied the center of attention." In a study of inner-city children, successful teachers were those whose behaviors included "having students repeat poor work until it is satisfactory, circulating around the room during seatwork periods and correcting students' work, discourgaging student movement about the classroom, and viewing one's role primarily as teaching and explaining subject matter..." A research review involving older students generally replicated the findings of research conducted with primary level children and suggested that, in the reviewer's words, "direct instruction may be the most effective method at any grade level when mastery of basic skills is the goal."

Direct instruction, when the term is used to denote this general set of teaching behaviors, was consistently found to produce results superior to those obtained when less direct teaching approaches were used. This finding emerged from studies involving students generally, disadvantaged students, remedial students and special education students; in various basic skill areas; and for both younger and older students. The reports which support

this hypothesis include those concerned with the Distar model programs, since those programs clearly meet and even exceed the criteria for direct instruction as the term is used here. Though not included among the support materials for the present report, two previous reports in this series also provided evidence for the efficacy of this form of direct instruction.[3]

Next we come to that group of studies and reviews which compared either a no-instruction approach or an indirect approach with a direct approach and defined the latter as direct instruction. As referenced earlier in this paper, this use of the term direct instruction does not specify any particular group of teaching behaviors; it merely differentiates between addressing the learning material intentionally/deliberately and addressing it less straightforwardly or not at all. The majority of studies support the hypothesis which emerged, namely that higher achievement results when skills and concepts are taught directly than when they are presented indirectly or not at all. In a sense, this hypothesis and the research which led to its development would appear to belabor the obvious, as it stands to reason that that which is best learned is that which is most taught. In another sense, however, it is well worth investigating and reporting on the relative efficacy of direct and non-direct teaching, because of the many currently used educational approaches which are either deliberately indirect (discovery learning) or indirect by default.

What the research says is that the belief that students will learn inferentially and incidentally through close, prolonged contact with academic material is simply not well-founded. The researchers who have examined these differing approaches have found that virtually all students learn better when

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[3]See Kathleen Cotton and W.G. Savard, Instructional Grouping: Group Size and Time Factors in Learning, Research on School Effectiveness Project Topic Summary Reports. (Portland, OR: Northwest Regional Educational Laboratory), 1981.

skills and concepts are presented directly, and that some students (e.g., low-ability children, special education students) can only learn in this way. The studies on the Distar model programs and those concerned with direct instruction as a set of teaching behaviors are included among the supporting documents for this hypothesis, as both of these categories represent forms of direct instruction as it is used here. Those studies which found no difference between approaches or which favored an indirect approach were fewer in number, less highly rated or concerned with educational situations in which basic skill instruction was not the major focus (e.g., junior high school English). Those researchers who sought to explain the superiority of direct instructional approaches tended to feel that the cognitive sophistication of small children and of many older children is simply not adequately developed for them to learn via an inferential discovery approach. To get the message, they must be given it.

Most of the studies and reviews examined in preparation for this report had to do with student achievement in one or more basic skill areas. Some, however, dealt with learning in other, more subjective areas, or with both basic skill development and other kinds of learning. Analysis of these reports led to the hypothesis that direct instruction is inappropriate for some educational settings, especially those involving older students and learning activities beyond basic skill development. Findings about learning situations for which direct instruction is not appropriate can be said to have emerged gratuitiously from some of the studies reviewed, as none of the researchers began by looking for settings which were not amenable to direct instructional techniques. In the course of investigating the effects of direct instruction (in any of the major ways this term is used), several researchers noted that its utility is not universal. As one investigator put

it, "It is important to recognize that direct instruction has little research base from which to discuss other desirable educational attainments, such as creativity and self-evaluation." It was also found that many older students and higher-ability students, while they can benefit from many of the component parts of a direct instruction approach, tend to respond better and learn more with indirect questioning techniques and other methods which allow them to make connections and discover the underlying principles of the learning material presented to them.

Conclusions

Analysis of the findings concerning the various forms of direct instruction lead to several conclusions. These are organized according to the different ways the term direct instruction is used in the research literature.

Distar programs in reading, arithmetic and language are effective in building basic skills among socioeconomically disadvantaged, primary age children. While the developers of these programs do not assume all such children to have poor language skills and lower arithmetic aptitudes, they do recognize that there is a higher probability that these children's general experience will be narrower and that they will enter school with less family-initiated teaching of academic and pre-academic skills than other children. Distar programs, with their focus on tightly structured lessons, small and assimilable units of information, extensive drill and emphasis on teacher-student interaction, have been shown to be highly effective in compensating for the deficits commonly experienced by disadvantaged children. Because of the interactive focus and the opportunity to demonstrate skill mastery, the programs also enhance the childrens' self-esteem and their attitudes toward school. While they have some degree of staying power, as

determined by the later school performance of students instructed with them, these programs do not have the power to prevent these students from falling behind their socioeconomically more fortunate counterparts over time. It may be that no educational program could produce such a long-term compensatory effect. Distar programs are also very effective for instructing low-ability children and educable special education students in the primary and upper elementary grades.

Direct instruction, as that term is used to denote the agreed-upon set of teaching strategies and behaviors described earlier, is very effective for promoting basic skill development among students generally. When teachers set and articulate learning goals, offer highly structured lessons, ask questions which are specific and narrow in scope, provide corrective feedback, and communicate affection and support to students, achievement results are superior to those obtained with other, less direct methods. All kinds of primary and upper elementary level students appear to achieve more in basic skill areas with this instructional approach, and students with learning problems resulting from handicaps, language barriers or limited background experiences seem to benefit most of all.

Direct instruction, as the term is used to denote addressing learning material straightforwardly, is more effective in promoting student achievement than are educational practices in which the things to be learned are addressed indirectly or not at all. This conclusion does not convey much information about what teaching strategies to use, but it does carry implications about which ones <u>not</u> to use, at least for fostering the development of basic skills. Students in general appear to require direct teaching in order to master these skills with maximum efficiency, thoroughness and permanence; and some students can only learn via a direct method.

Very bright students, very mature students, many older students and students working in many areas beyond the basic skills do not derive maximum benefits from a direct instructional approach. Direct instruction, as that term refers to any of the major instructional approaches described in this paper, is irrelevant to some educational purposes, restrictive for some school subjects, and an affront to the learning capacity of some students. One reviewer, after discussing the virtues of direct instruction for many purposes, comments that "direct instruction may not be the best approach, or even appropriate, for some curricular areas that do not involve skill mastery, but instead seek to promote appreciation, general familiarity, enrichment, or student personal development."

Recommendations

In light of the findings and conclusions emerging from research on direct instruction, the following recommendations are offered:

1. The Distar programs should be reviewed for potential use in school characterized by large populations of socioeconomically disadvantaged primary age students. Personnel in schools with smaller populations of such students might also consider the use of these programs in adjunctive, compensatory classes for them.

2. As the Distar programs appear to be very helpful to learning disabled, mildly mentally retarded and other educable special education students, special education program coordinators and teachers are encouraged to consider using these programs with these populations.

3. Educational personnel at all levels are encouraged to become familiar with the group of teaching strategies and behaviors collectively termed "direct instruction," and teachers are encouraged to apply these to their classroom teaching.

4. Those who are planning to adopt an educational program for preschool or primary level children, or to make changes in the kinds of instruction offered these children, should select programs in which direct instructional methods are required or implied, if basic skill development for these children is a major goal.

5. Educators should not proceed from the assumption that students will infer meanings, understandings and messages when these are offered by implication via indirect teaching methods. Students in one study did not experience a reduction in their ethnic stereotyping when they learned about Puerto Rican playwrights, Jewish athletes, and black physicists; they experienced a reduction in their ethnic stereotyping when they studied ethnic stereotyping.

6. Policymakers and other educators should not make a goal of applying direct instructional methods to all students and all curricular areas. Advanced students and more subjective fields of study require the opportunity for exposure to the material, indirect instructional methods and an open-ended attitude toward outcomes, in order for appreciation and creativity to develop.

DIRECT INSTRUCTION
Decision Display
#1

Restatement of issue as a hypothesis:

Use of Distar (Direct Instruction System for Teaching and Remediation) programs with disadvantaged, primary level children has a positive effect on the basic skill achievement and affective development of those children.

Item Number	Short Title	Quality Rating of Study (5=High)	
Items which tend to support hypothesis:			
250	Becker, 1976, Direct Instruction Data Analysis	[4]	
253	Singer, 1973, Structured Kindergarten Instruction	[4]	
259	Becker & Gersten, 1981, Later Effects of DIFT	[4]	
261	Gersten & Carnine, 1981, Direct Instruction Math	[4]	(nearly all studies support)
274	Gersten, 1981, Distar in Special Education	[4]	(nearly all studies support)
252	Patching, 1979, Critical Reading Skills	[3]	
258	Duran, 1980, Hispanic Reading Study	[3]	

(See also Item No. 280.)

Items which tend to deny hypothesis:

None

Items which are inconclusive regarding the hypothesis:

286	House, et al., 1978, Follow Through Critique	[4]	

Items which were excluded because they were weak:

None

Items which were excluded because they were judged to be irrelevant to this hypothesis:

153 Rosenshine, n.d., Academic Engaged Time
246 Fedigan & Gay, 1978, Alberta Research Reviews
247 Beck, 1979, Instructional Ingredients
248 Murnane & Phillips, 1979, Effective Inner City Teachers
249 Greedy, 1975, Spelling Research Reviews
251 Rosenshine, 1976, Teacher Behavior Research
254 Venezky, 1975, Prereading Skills
255 Berliner & Rosenshine, 1976, Knowledge Acquisition
256 Jenkins, et al., 1978, Vocabulary and Reading Study
257 Brophy, 1979, Teacher Effectiveness Research
260 O'Donnell & Smith, 1973, Syntactic Structure
262 Calfee & Piontkowski, 1981, Reading Diary
263 Becher, 1980, Teacher Behavior & Math Achievement
264 Meyer & Cohen, 1975, General Reading vs. Direct Instruction
265 Oliver, 1973, High Intensity Practice
266 Becker, 1977, Field Research on Reading
267 Freeman, et. al., 1981, Countering Ethnic Stereotypes
268 Wicker & Tyler, 1975, Improving Locus of Control
269 Grusec, et. al., 1978, Altruism
270 Corno, et al., 1981, Student Self Appraisals
271 Evertson, et al., 1980, Jr. High Math & English
272 Au, 1980, Comprehension-Oriented Reading
273 Haisley & Perino, 1977, "K"indergarten Study
275 Pany & Jenkins, 1977, LD Comprehension Study
276 Stallings, 1981, Secondary Research Review
277 Schneider, 1981, School Improvement
278 Cotton, 1982, Effective Spelling Instruction
279 Good, 1979, Elementary Teacher Effectiveness
281 Carnine & Englemann, 1982, Direct Instruction Operations
282 Medley, 1977, Teacher Competence and Effectiveness
283 Leo & Sahraie, 1981, Improving Teaching
284 Sorge & Kline, 1973, College Instructor Behavior
285 Glenn & Ellis, 1982, Direct vs. Indirect Teaching

DIRECT INSTRUCTION
Decision Display
#2

Restatement of issue as a hypothesis:

Use of the teaching strategies and behaviors collectively termed "direct instruction" has a positive effect on the basic skill achievement of primary and upper elementary level children.

Item Number	Short Title	Quality Rating of Study (5=High)	
Items which tend to support hypothesis:			
279	Good, 1979, Elementary Teacher Effectiveness	[5]	(data from over 50 studies)
282	Medley, 1977, Teacher Competence and Effectiveness	[5]	(majority of studies support)
153	Rosenshine, n.d., Academic Engaged Time	[4]	(nearly all studies support)
250	Becker, 1978, Direct Instruction Data Analysis	[4]	
253	Singer, 1973, Structured Kindergarten Instruction	[4]	
257	Brophy, 1979, Teacher Effectiveness Research	[4]	(data from over 20 studies support)
259	Becker & Gersten, 1981, Later Effects of DIFT	[4]	
261	Gersten & Carnine, 1981, Direct Instruction Math	[4]	(majority of studies support)
270	Corno, et al., 1981, Student Self Appraisals	[4]	
271	Evertson, et al., 1980, Jr. High Math & English	[4]	(math part of study supports)
274	Gersten, 1981, Distar in Special Education	[4]	(data from 12 studies support)
276	Stallings, 1981, Secondary Research Review	[4]	(nearly all studies support)
248	Murnane & Phillips, 1979, Effective Inner City Teachers	[3]	
251	Rosenshine, 1976, Teacher Behavior Research	[3]	(nearly all studies support)
252	Patching, 1979, Critical Reading Skills	[3]	
255	Berliner & Rosenshine, 1976, Knowledge Acquisition	[3]	(nearly all studies support)
268	Wicker & Tyler, 1975, Improving Locus of Control	[3]	
277	Schneider, 1981, School Improvement	[3]	(majority of studies support)
283	Leo & Sahraie, 1981, Improving Teaching	[3]	(majority of studies support)

(See also Item No. 280.)

Item Number	Short Title	Quality Rating of Study [ ]	

Items which tend to deny hypothesis:

None

Items which are inconclusive regarding the hypothesis:

271	Evertson, et al., 1980, Jr. High Math & English	[4]	(English part of study inconclusive)
263	Becher, 1980, Teacher Behavior & Math Achievement	[2]	

Items which were excluded because they were weak:

None

Items which were excluded because they were judged to be irrelevant to this hypothesis:

246 Fedigan & Gay, 1978, Alberta Research Reviews
247 Beck, 1979, Instructional Ingredients
249 Geedy, 1975, Spelling Research Review
254 Venezky, 1975, Prereading Skills
256 Jenkins, et al., 1978, Vocabulary and Reading Study
260 O'Donnell & Smith, 1979, Syntatic Structure
262 Calfee & Piontkowski, 1981, Reading Diary
264 Meyer & Cohen, 1975, General Reading vs. Direct Instruction
265 Oliver, 1973, High Intensity Practice
266 Becker, 1977, Field Research on Reading
267 Freedman, et al., 1981, Countering Ethnic Stereotypes
269 Grusec, et al., 1978, Altruism
272 Au, 1980, Comprehension-Oriented Reading
273 Haisley & Perino, 1977, "K"indergarten Study
275 Pany & Jenkins, 1977, LD Comprehension Study
278 Cotton, 1982, Effective Spelling Instruction
281 Carnine & Englemann, 1982, Direct Instruction Operations
284 Sorge & Kline, 1973, College Instructor Behavior
285 Glenn & Ellis, 1982, Direct vs. Indirect Teaching
286 House, et al., 1978, Follow Through Critique

DIRECT INSTRUCTION
Decision Display
#3

Restatement of issue as a hypothesis:

Higher achievement results when skills and concepts are taught directly than when they are presented indirectly or not at all.

Item Number	Short Title	Quality Rating of Study (5=High)	
Items which tend to support hypothesis:			
279	Good, 1979, Elementary Teacher Effectiveness	[5]	(data from over 50 studies support)
282	Medley, 1977, Teacher Competence and Effectiveness	[5]	(majority of studies support)
153	Rosenshine, n.d., Academic Engaged Time	[4]	(nearly all studies support)
250	Becker, 1978, Direct Instruction Data Analysis	[4]	
253	Singer, 1973, Structured Kindergarten Instruction	[4]	
257	Brophy, 1979, Teacher Effectiveness Research	[4]	(data from over 20 studies support)
259	Becker & Gersten, 1981, Later Effects of DIFT	[4]	
261	Gersten & Carnine, 1981, Direct Instruction Math	[4]	(majority of studies support)
270	Corno, et al., 1981, Student Self Appraisals	[4]	
271	Evertson, et al., 1980, Jr. High Math & English	[4]	
274	Gersten, 1981, Distar in Special Education	[4]	(data from 12 studies support)
276	Stallings, 1981, Secondary Research Review	[4]	(nearly all studies support)
248	Murnane & Phillips, 1979, Effective Inner City Teachers	[3]	
249	Geedy, 1975, Spelling Research Review	[3]	(majority of studies support)
251	Rosenshine, 1976, Teacher Behavior Research	[3]	(nearly all studies support)
252	Patching, 1979, Critical Reading Skills	[3]	(Distar superior to no-intervention)
255	Berliner & Rosenshine, 1976, Knowledge Acquisition	[3]	(nearly all studies support)

Item Number	Short Title	Quality Rating of Study [ ]	
Items which tend to support hypothesis: -- Cont'd			
258	Duran, 1980, Hispanic Reading Study	[3]	
262	Calfee & Piontkowski, 1981, Reading Diary	[3]	
268	Wicker & Tyler, 1975, Improving Locus of Control	[3]	
273	Haisley & Perino, 1977, "K"indergarten Study	[3]	
277	Schneider, 1981, School Improvement	[3]	(majority of studies support)
278	Cotton, 1982, Effective Spelling Instruction	[3]	(majority of studies support)
283	Leo & Sahraie, 1981, Improving Teaching	[3]	(majority of studies support)
285	Glenn & Ellis, 1982, Direct vs. Indirect Teaching	[3]	
246	Fedigan & Gay, 1978, Alberta Research Reviews	[2]	(majority of studies support)
256	Jenkins, et al., 1978, Vocabulary and Reading Study	[2]	(for vocabulary development)
267	Freedman, et al., 1981, Countering Ethnic Stereotypes	[2]	
275	Pany & Jenkins, 1977, LD Comprehension Study	[2]	(for vocabulary development)
(See also Item No. 280.)			
Items which tend to deny hypothesis:			
252	Patching, 1979, Critical Reading Skills	[3]	
264	Meyer & Cohen, 1975, General Reading vs. Direct Instruction	[3]	
256	Jenkins, et al., 1978, Vocabulary and Reading Study	[2]	(for comprehension)
265	Oliver, 1973, High Intensity Practice	[2]	
275	Pany & Jenkins, 1977, LD Comprehension Study	[2]	(for recall of story facts)
Items which are inconclusive regarding the hypothesis:			
263	Becher, 1980, Teacher Behavior & Math Achievement	[2]	
Items which were excluded because they were weak:			
284	Sorge & Kline, 1973, College Instructor Behavior		

Items which were excluded because they were judged to be irrelevant to this hypothesis:

247 Beck, 1979, Instructional Ingredients
254 Venezky, 1975, Prereading Skills
259 Becker & Gersten, 1981, Later Effects of DIFT
266 Becker, 1977, Field Research on Reading
269 Grusec, et al., 1978, Altruism
272 Au, 1980, Comprehension-Oriented Reading
281 Carnine & Englemann, 1982, Direct Instruction Operations
286 House, et al., 1978, Follow Through Critique

DIRECT INSTRUCTION
Decision Display
#4

Restatement of issue as a hypothesis:

Direct instruction is inappropriate for some educational settings, especially those involving older students and learning activities beyond basic skill development.

Item Number	Short Title	Quality Rating of Study (5=High)	
Items which tend to support hypothesis:			
279	Good, 1979, Elementary Teacher Effectiveness	[5]	(data from over 50 studies support)
257	Brophy, 1979, Teacher Effectiveness Research	[4]	(data from over 20 studies support)
271	Evertson, et al., 1980, Jr. High Math & English	[4]	
251	Rosenshine, 1976, Teacher Behavior Research	[3]	(nearly all studies support)
Items which tend to deny hypothesis:			
	None		
Items which are inconclusive regarding the hypothesis:			
	None		
Items which were excluded because they were weak:			
284	Sorge & Kline, 1973, College Instructor Behavior		

Items which were excluded because they were judged to be irrelevant to this hypothesis:

153 Rosenshine, n.d., Academic Engaged Time
246 Fedigan & Gay, 1978, Alberta Research Reviews
247 Beck, 1979, Instructional Ingredients
248 Murnane & Phillips, 1979, Effective Inner City Teachers
249 Geedy, 1975, Spelling Research Review
250 Becker, 1978, Direct Instruction Data Analysis
252 Patching, 1979, Critical Reading Skills
253 Singer, 1973, Structured Kindergarten Instruction
254 Venezky, 1975, Prereading Skills
255 Berliner & Rosenshine, 1976, Knowledge Acquisition
256 Jenkins, et al., 1978, Vocabulary and Reading Study
258 Duran, 1980, Hispanic Reading Study
259 Becker & Gersten, 1981, Later Effects of DIFT
260 O'Donnell & Smith, 1979, Syntatic Structure
261 Gersten & Carnine, 1981, Direct Instruction Math
262 Calfee & Piontkowski, 1981, Reading Diary
263 Becher, 1980, Teacher Behavior & Math Achievement
264 Meyer & Cohen, 1975, General Reading vs. Direct Instruction
265 Oliver, 1973, High Intensity Practice
266 Becker, 1977, Field Research on Reading
267 Freedman, et al., 1981, Countering Ethnic Stereotypes
268 Wicker & Tyler, 1975, Improving Locus of Control
269 Grusec, et al., 1978, Altruism
270 Corno, et al., 1981, Student Self Appraisals
272 Au, 1980, Comprehension-Oriented Reading
273 Haisley & Perino, 1977, "K"indergarten Study
274 Gersten, 1981, Distar in Special Education
275 Pany & Jenkins, 1977, LD Comprehension Study
276 Stallings, 1981, Secondary Research Review
277 Schneider, 1981, School Improvement
278 Cotton, 1982, Effective Spelling Instruction
280 Becker & Carnine, 1980, Direct Instruction Follow Through
281 Carnine & Englemann, 1982, Direct Instruction Operations
282 Medley, 1977, Teacher Competence and Effectiveness
283 Leo & Sahraie, 1981, Improving Teaching
284 Sorge & Kline, 1973, College Instructor Behavior
285 Glenn & Ellis, 1982, Direct vs. Indirect Teaching
286 House, et al., 1978, Follow Through Critique

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247	Beck, I.L. Instructional ingredients for the development of beginning reading competence. Volume 5 of: What Do We Know About Teaching and Learning in Urban Schools? St. Louis: CEMREL, Inc., 1979. (ERIC/EDRS No. ED 185 161)
250	Becker, W.C. Symposium on direct instruction: the Follow Through data show that some programs work better than others. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Ontario, March 1978. (ERIC/EDRS No. ED 173 363)
266	_____ Teaching reading and language to the disadvantaged-What we have learned from field research. Harvard Educational Review, 1977, 47, 518-543.
280	_____, & Carnine, D.W. Direct Instruction: An effective approach to educational intervention with disadvantaged and low performers. In Lahey, B.B., & Kazdin, A.E. (Eds.). Advances in Clinical Child Psychology. New York, NY: Plenom Publishing Corporation, 1980.
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257	Brophy, J.E. Advances in teacher effectiveness research. Occasional paper No. 18. East Lansing, MI: Michigan State University, Institute for Research on Teaching, 1979. (ERIC/EDRS No. ED 173 340)

Item No.	Citation
262	Calfee, R.C. & Piontkowski, D.C. The reading diary: Acquisition of decoding. Reading Research Quarterly, 1981, 16, 346-373.
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Item No.	Citation
261	_____ & Carnine, D. Direct Instruction Mathematics: Longitudinal evaluation of over 2,000 low-income children. Paper presented at the Annual Meeting of the American Educational Research Association, Los Angeles, CA, April 1982.
285	Glenn, A.D., & Ellis, A.K. Direct and indirect methods of teaching problem solving to elementary school children. Social Education, 1982, 46, (2), 134-136.
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248	Murnane, R.J., & Phillips, B.R. Effective teachers of inner city children: Who they are and what they do. Washington D.C.: National Institute of Education, June 1979.
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Item No.	Citation
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253	Singer, B. The effects of structured instruction on kindergarten pupils. Final report. USOE Region II, May 1973. (ERIC/EDRS No. ED 087 564)
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SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 153 LOCATION: NWREL Dissemination Program

REVIEWER: K. Cotton DATE REVIEWED: January 1982

CITATION: Rosenshine, B.V. Academic engaged time, content covered, and direct instruction. University of Illinois, n.d.

DESCRIPTORS: Direct Instruction, Time Factors (Learning)

SHORT TITLE: Rosenshine, n.d., Academic Engaged Time

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE X DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 [4] 5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a very good review which clearly restates the important findings and conclusions emerging from the research.

SYNOPSIS:

This is a review/analysis of research on the effects of instructional time and teaching methods on the reading and mathematics achievement of students in grades 1-5 in the U.S. It is "both a summary and expansion of three previous papers: Rosenshine (1976), Berliner and Rosenshine (1977) and Rosenshine and Berliner (1977)."

ITEM NUMBER: 153 SHORT TITLE: Rosenshine, n.d., Academic Engaged Time

RESEARCHER'S FINDINGS:

Of 15 studies of "content covered or opportunity to learn," all but one found significant relationships between content covered and student achievement gain.

Student attention or engagement was also strongly related to achievement.

"In studies which consider only allocated time, most of the results tend to be non-significant."

"Teachers who most successfully promoted achievement gain...approached the subject matter in a direct, businesslike way, organized learning around questions they posed, and occupied the center of attention." Student choice of activities yielded negative results.

Teachers working with small groups (3-7 students) or large groups was positively related to achievement; teachers working with three students or less was negatively related to class achievement gain.

RESEARCHER'S CONCLUSIONS:

The author cautions that the studies reviewed are of varying qualities. He also emphasizes "the need to proceed with caution in implementing [the findings emerging from the studies] into teacher training programs or into evaluative checklists for teachers."

Content covered and student engaged time are the most consistently reliable predictors of achievement.

"There are no lists of essential teacher behaviors, nor is it claimed that any one type of teaching method or style is inherently superior... The primary goal of the teacher is obtaining 'sufficient' student content covered and academically engaged minutes."

REVIEWER'S NOTES AND COMMENTS:

None.

3-

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 246 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: January 1982

CITATION: Fedigan, L., & Gay, G. School-based elements related to achievement and elements related to student success in schooling and education. Executive Summary: Two Reviews of the Literature Commissioned by the Minister's Advisory Committee on Student Achievement. Edmonton, Alberta: Alberta Department of Education, 1978. (ERIC/EDRS No. ED 181 042)

DESCRIPTORS: Direct Instruction, Educational Environment, Family Environment, Mastery Learning

SHORT TITLE: Fedigan & Gay, 1978, Alberta Research Reviews

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE X DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 [2] 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

Detail is sparse concerning the studies reviewed.

SYNOPSIS:

Two literature reviews on the effects of educational and environmental factors on student achievement are summarized in this report. In the Gay review 55 studies, most of which were conducted in the U.S., were examined and their findings summarized in a series of charts. In the Fedigan review an unspecified number of American, Canadian and British studies were examined and discussed.

ITEM NUMBER: 246 SHORT TITLE: Fedigan & Gay, 1978, Alberta Research Reviews

RESEARCHER'S FINDINGS:

Factors identified by Gay as having a positive effect on student achievement include: (1) middle or high socio-economic status; (2) having both parents in the home; (3) positive parent attitudes toward education; (4) use of books in the home; (5) higher teachers' salaries; (6) more teacher training; teacher emphasis on cognitive development; (7) higher teacher expectations of students; (8) greater teacher warmth; (9) better teacher control of classes, etc. Factors negatively related to achievement include: (1) large district enrollment; (2) large family size; (3) lack of library services; (4) overcrowded housing; (5) juvenile deliquency, etc. Factors unrelated to achievement included: (1) attendance rate; (2) student sex; (3) school facilities and space; (4) class size; (6) per pupil expenditure; and (7) age of teachers.

Fedigan found that direct instructional methods are positively related to achievement, especially for low socio-economic status students and especially in the primary grades. The studies reviewed also showed that teacher expectations influence student performance. No particular curriculum was favored over any other. The mastery learning approach was shown to be especially effective.

RESEARCHER'S CONCLUSIONS:

"Both Drs. Fedigan and Gay found that the research about the effects of various factors on achievement is inconclusive... Both reported that environmental or non-school-based elements...have a substantial relationship to achievement, while educational or school-based elements may have a less substantial and more inconsistent relationship... Both views, point out the significance of the interaction between educational and environmental factors."

REVIEWER'S NOTES AND COMMENTS:

None.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 247 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: January 1982

CITATION: Beck, I.L. Instructional ingredients for the development of beginning reading competence. Volume 5 of: What Do We Know About Teaching and Learning in Urban Schools? St. Louis: CEMREL, Inc., 1979. (ERIC/EDRS No. ED 185 161)

DESCRIPTORS: Direct Instruction

SHORT TITLE: Beck, 1979, Instructional Ingredients

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS X

RELEVANT ___ IRRELEVANT X FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

SYNOPSIS:

This paper provides the author's conclusions about beginning reading instruction based on a review of research and an analysis of the characteristics of various reading programs. It is not a study or review of studies.

ITEM NUMBER: 247 SHORT TITLE: Beck, 1979, Instructional Ingredients

RESEARCHER'S FINDINGS:

RESEARCHER'S CONCLUSIONS:

REVIEWER'S NOTES AND COMMENTS:

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 248 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: January 1982

CITATION: Murnane, R.J., & Phillips, B.R. Effective teachers of inner city children: Who they are and what they do. Washington D.C.: National Institute of Education, June 1979.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Murnane & Phillips, 1979, Effective Inner City Teachers

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT _X_ IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE _X_ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This study is well designed and has important implications for instruction of inner city children.

SYNOPSIS:

This study utilized two different research methodologies to determine what factors are present in the effective vocabulary skill development of elementary students. Black children in grades 3-6 whose families were participants in a federal welfare reform project comprised the sample. Data on the school and students were collected from school records. Interviews with parents produced data on demographic and home characteristics. Data on teacher characteristics were gathered via teacher questionnaires.

ITEM NUMBER: 248 SHORT TITLE: Murnane & Phillips, 1979, Effective Inner City Teachers

RESEARCHER'S FINDINGS:

Teaching behaviors systematically related to student learning are those which are collectively termed direct instruction. These include having students repeat poor work until it is satisfactory, circulating around the room during seatwork periods and correcting students' work, discouraging student movement about the classroom, viewing one's role primarily as teaching and explaining subject matter, and (at least for some grades) spending the majority of time in whole-class or individualized (as opposed to small group) instruction.

RESEARCHER'S CONCLUSIONS:

"Our results provide some support for the direct-instruction hypothesis. This support must be considered tentative because the values and significance of the individual coefficients vary across grade levels."

REVIEWER'S NOTES AND COMMENTS:

None.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 249 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: January 1982

CITATION: Geedy, P. What research tells us about spelling. Elementary English, 1975, 52, 233-236.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Geedy, 1975, Spelling Research Reviews

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE X DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

More detail on the research studies reviewed would be helpful, but this is nevertheless a good review.

SYNOPSIS:

This is a review of research on the development of spelling skills. The reviewer cites research findings on approaches which have been shown to be effective in developing spelling skills and references particular models and programs which incorporate these approaches.

ITEM NUMBER: 249 SHORT TITLE: Geedy, 1975, Spelling Research Review

RESEARCHER'S FINDINGS:

Research on spelling skill development indicates that language arts instruction, in order to be maximally effective, needs to include direct, systematic instruction in spelling, especially in the case of students of below-average ability in spelling.

There is general agreement that 15 to 20 minutes daily should be devoted to the direct teaching of spelling from the middle of the second grade through the completion of elementary school.*

Studies show that it is more efficient to study words from lists rather than in context, but they also emphasize that an effective language arts program needs to incorporate direct teaching of spelling words with teaching the words in a meaningful context.

RESEARCHER'S CONCLUSIONS:

"Research indicates that no one channel or approach is an effective answer to the question of how to teach children to spell. Each discipline can suggest means to make the process more successful and meaningful to children. The application of these theories requires orchestration by a knowledgeable and sensitive teacher."

REVIEWER'S NOTES AND COMMENTS:

A copy of the review may be found in the Direct Instruction backup file.

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*The present reviewer recently completed a spelling research review and found that most researchers and theorists favored 60-75 minutes per week as the maximum instructional time. (See Item Report No. 278.) This researcher's others findings are in tune with spelling research generally.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 250 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: January 1982

CITATION: Becker, W.C. Symposium on direct instruction: the Follow Through data show that some programs work better than others. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Ontario, March 1978. (ERIC/EDRS No. ED 173 363)

DESCRIPTORS: Direct Instruction

SHORT TITLE: Becker, 1978, Direct Instruction Data Analysis

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 [4] 5 (Strong)

BRIEF DISCUSSION OF RATING:

This analysis was well done and convincingly reflects portions of the report which inspired it.

SYNOPSIS:

In 1979 a report on the Project Follow Through Planned Variation Experiment was published by Abt Associates. This report compared several Follow Through models in terms of their effectiveness in promoting student achievement and affective development. Then in 1978 a blue-ribbon panel critiqued the Abt report and drew conclusions contrary to the Abt findings. The panel's conclusions included: (1) instructional models that emphasize basic skills are no more effective than other approaches; and (2) Follow Through participation made no difference in student outcomes. The panel agreed with Abt that the effectiveness of a teaching approach varied greatly from district to district.

ITEM NUMBER: 250 SHORT TITLE: Becker, 1978, Direct Instruction Data Analysis

In this paper the author reanalyzed the data and took issue with the panel's conclusions about one of the approaches studied, the Direct Instruction Model. It should be noted that the author is co-developer of this model.

RESEARCHER'S FINDINGS:

The author's analysis revealed that the panel had misclassified much of the data, made inaccurate statements about sample size. Reanalyzing the data with these errors corrected, the author found that: (1) Direct Instruction showed substantial positive effects on basic skill development; and (2) this model ranked first among the models studied in promoting positive affective outcomes.

RESEARCHER'S CONCLUSIONS:

"...the Direct Instruction Model [was shown] to be effective in comparison to traditional programs...and in comparison to the other model approaches to compensatory education having the same resources available... Direct Instruction was more effective than any of the other Follow Through models, and the degree of effectiveness was non-trivial."

REVIEWER'S NOTES AND COMMENTS:

See Item No. 286 for an abstract of the panel's report.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 251 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: January 1982

CITATION: Rosenshine, B. Recent research on teaching behaviors and student achievement. Journal of Teacher Education, 1976, 27, 61-64.

DESCRIPTORS: Direct Instruction, Teacher Behavior

SHORT TITLE: Rosenshine, 1976, Teacher Behavior Research

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE X DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

It would be useful to have more detail on the studies reviewed; however, the review is a clear presentation of findings from the work of major researchers in the area of teacher effectiveness.

SYNOPSIS:

In this article the author focused on studies from the recent past which were concerned with the relationship between classroom instruction and student achievement. The work of 12 researchers or research groups were the focus of the investigation. The topical areas discussed were: (1) classroom questioning, (2) tutoring, (3) degree of implementation, (4) generic and specific teaching skills, (5) factors affecting achievement of low SES students in the primary grades, and (6) direct instruction for low SES students.

Direct instruction was described by the author as follows: "...a great deal of time is spent on academic activities, with a predominance of seatwork using structured materials. Teacher and workbook questions are narrow and direct, usually with a single correct answer. Teachers and materials provide immediate feedback using praise and acknowledgement of student answers. Students work in groups supervised by the teacher with little free time or unsupervised activity..."

ITEM NUMBER: 251 SHORT TITLE: Rosenshine, 1976, Teacher Behavior Research

RESEARCHER'S FINDINGS:

Questioning: Low ability students achieved more when they worked with direct questions; higher ability students achieved more when questioning techniques involved probing and redirection.

Tutoring: The results of studies on tutoring were inconclusive about the value of this method.

Implementation: Teacher implementation of programs becomes more refined and stable (less mechanical) as they gain experience. The relationship to student outcomes was not investigated.

Generic/Specific Skills: Studies in this area yielded contradictory findings, and the relationship to student outcomes was not explored.

Studies of Primary Age, Low SES Students: The amount of time spent directly on instruction was significantly related to student achievement in math and reading. The students performed best when factual, single-answer questions were presented to them. Inattention was significantly and negatively related to achievement. Praise affected achievement positively. Student-initiated comments had a negative effect; teacher-initiated comments made no difference.

Direct Instruction: Student achievement and affective outcomes were most positive when the students received direct instruction.

RESEARCHER'S CONCLUSIONS:

The author restated his discoveries in summary form.

REVIEWER'S NOTES AND COMMENTS:

A copy of the journal article may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 252 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: January 1982

CITATION: Patching, W.G. An investigation of the effect of using Direct Instruction procedures to teach three critical reading skills to skill deficient grade 5 children. Ph.D. Thesis, University of Oregon, Eugene, Oregon, 1979.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Patching, 1979, Critical Reading Skills

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE ___ DISSERTATION ABSTRACT X

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This study convincingly demonstrated the superiority of the Direct Instruction method.

SYNOPSIS:

This study examined the effects on students' critical reading skills when: (1) no skill development activities were undertaken; (2) students were taught these skills using methods fundamental to the Direct Instruction model developed at the University of Oregon; (3) students learned via a Workbook and Corrective Feedback method. Thirty-nine fifth graders who were identified as deficient in critical reading skills were randomly assigned to the three groups, and experimental students were individually instructed in three critical reading skills. Each skill was presented in a 30-minute lesson. Three post-tests, one for each skill area, were administered to experimental and control students.

ITEM NUMBER: 252 SHORT TITLE: Patching, 1979, Critical Reading Skills

RESEARCHER'S FINDINGS:

The Direct Instruction method was significantly more effective than either the Workbook with Corrective Feedback method or the no-intervention condition.

No significant difference was found between the performances of the Workbook with Corrective Feedback and the no-intervention groups.

RESEARCHER'S CONCLUSIONS:

The Direct Instruction method was more effective for teaching each of the three skills than either of the other formats.

REVIEWER'S NOTES AND COMMENTS:

A copy of the abstract may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 253 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: January 1982

CITATION: Singer, B. The effects of structured instruction on kindergarten pupils. Final report. USOE Region II, May 1973. (ERIC/EDRS No. ED 087 564)

DESCRIPTORS: Direct Instruction

SHORT TITLE: Singer, 1973, Structured Kindergarten Instruction

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 [4] 5 (Strong)

BRIEF DISCUSSION OF RATING:

Design, data analysis and presentation of evidence were very carefully executed.

SYNOPSIS:

This two-phase study investigated the effects of highly structured language arts instruction on the intellectual growth, language arts achievement and school adjustment of middle class kindergarten children. In the first part of the study 303 children were randomly assigned to four conditions: (1) a modified Distar Language Program; (2) a modified Distar Reading Program; (3) the Sullivan Programmed Reading Program; and (4) a traditional kindergarten program featuring socialization and readiness activities and an unstructured approach to language arts. Children in the first three conditions were instructed individually, and all students were tested at the end of the year following 6 1/2 months of instruction.

In the second part of the study 200 first graders who had participated in part one were assigned to: (1) the Sullivan Reading Program; (2) the Distar Reading Program; or (3) the traditional program, involving a phonics program and basal readers. Children were tested at the beginning and end of first grade.

ITEM NUMBER: 253 SHORT TITLE: Singer, 1973, Structured Kindergarten Instruction

RESEARCHER'S FINDINGS:

Distar Language Program children had higher IQ scores and similar general achievement scores when compared with traditionally instructed children at the end of kindergarten. There were no differences at the end of first grade.

Distar Reading Program students had higher reading scores and similar spelling scores when compared with traditionally instructed children at the end of kindergarten. Distar children performed better on both measures at the end of first grade than traditionally instructed children.

Sullivan Reading Program children outperformed traditionally instructed children in both reading and spelling at the end of kindergarten. At the end of first grade the Sullivan children's scores were higher than the traditionally instructed children in both areas, though the spelling differences were not significant.

Children in the three structured instruction conditions did not differ from traditionally instructed children on school adjustment measures at the end of kindergarten, but evidenced significantly better adjustment at the end of first grade.

RESEARCHER'S CONCLUSIONS:

Structured language arts programs are superior to traditional programs for promoting intellectual development, language arts achievement and school adjustments.

The researcher's analysis of the data led him to additional conclusions, including that children below age 6 1/2 can learn to read without adverse effects and that boys and girls perform equally well with structured instructional methods.

Recommendations for further research are offered.

REVIEWER'S NOTES AND COMMENTS:

The modifications of the Distar Programs involved an intensification of the verbal interaction between child and teacher.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 254 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: January 1982

CITATION: Venezky, R.L. Prereading skills: Theoretical foundations and practical applications. Madison: Wisconsin University, Research and Development Center for Cognitive Learning, May 1975. (ERIC/EDRS No. ED 109 663)

DESCRIPTORS: Direct Instruction

SHORT TITLE: Venezky, 1975, Prereading Skills

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS X

RELEVANT ___ IRRELEVANT X FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

SYNOPSIS:

In this paper the author discusses the importance of prereading skill development activities and suggests instructional methods. While direct instructional techniques are favored, this is not a research study on their efficacy.

ITEM NUMBER: 254 SHORT TITLE: Venezky, 1975, Prereading Skills

RESEARCHER'S FINDINGS:

RESEARCHER'S CONCLUSIONS:

REVIEWER'S NOTES AND COMMENTS:

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 255 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: January 1982

CITATION: Berliner, D.C., & Rosenshine, B. The acquisition of knowledge in the classroom. Beginning Teacher Evaluation Study, Technical Report IV-1. San Francisco: Far West Laboratory for Educational Research and Development, 1976. (ERIC/EDRS No. ED 146 156)

DESCRIPTORS: Direct Instruction, Teacher Behavior, Time Factors (Learning)

SHORT TITLE: Berliner & Rosenshine, 1976, Knowledge Acquisition

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE X DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a useful review and one that identifies several major problems in specifying the relationship between school practices and student outcomes.

SYNOPSIS:

In this paper, the data from several major studies are cited and findings from them are discussed. Many of the findings from the large-scale Beginning Teacher Evaluation study are used to draw conclusions about effective teaching and learning.

ITEM NUMBER: 255 SHORT TITLE: Berliner & Rosenshine, 1976, Knowledge Acquisition

RESEARCHER'S FINDINGS:

Curricula: When the classroom is the unit of analysis, research has shown that different curricula whose coverage and content emphasis are similar have similar potential for helping students to acquire knowledge. Such curricula have been shown to have different potential for facilitating knowledge acquisition when the individual student is the unit of analysis.

Communication Methods: Different methods (lecture, discussion, CAI, etc.) were found to have equal potential for facilitating knowledge acquisition. They are not equal in all ways, however (e.g., efficiency, cost, effect on motivation, etc.).

Curriculum and Methods: "Knowledge acquisition by students of similar ability levels will be roughly equivalent, at least when the content and emphasis of the curricula and methods are similar and the class is the unit of analysis."

Teacher's Role: "...teacher behavior focused on direct instruction results in increased acquisition of student knowledge and skills."

RESEARCHER'S CONCLUSIONS:

"In general, studies of isolated teacher skills and behavior in natural classroom environments have not produced much information about how knowledge is acquired in the classroom. This state of affairs will continue until investigators engaged in research on teaching have learned how to work with the concept of appropriateness, define a unit of analysis for the study of teaching, obtain stable estimates of teacher behavior over occasions, and perform extensive construct validation."

REVIEWER'S NOTES AND COMMENTS:

In the researcher's view, direct instruction refers to "a set of teaching behaviors focused on academic matters where goals are clear to students; time allocated for instruction is sufficient and continuous; content coverage is extensive; student performance is monitored; questions are at a low cognitive level and produce many correct responses; and feedback to students is immediate and academically oriented...the teacher controls instructional goals, chooses material appropriate for the students' ability level, and paces the instructional episode. Interaction is characterized as structured but not authoritarian; rather, learning takes place in a convival academic atmosphere."

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 256 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Jenkins, J.R., Pany, D., & Schreck, J. Vocabulary and reading comprehension: Instructional effects. Technical report No. 100. Cambridge, MA: Bolt, Baranek and Newman, Inc.; Champaign, IL: Center for the Study of Reading, August 1978. (ERIC/EDRS No. ED 160 999)

DESCRIPTORS: Direct Instruction

SHORT TITLE: Jenkins, et al., 1978, Vocabulary and Reading Study

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 [2] 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

The samples were small and the treatment periods short. In addition, the researchers themselves cite design factors which might have influenced results.

SYNOPSIS:

The effects of vocabulary instruction on word knowledge and reading comprehension were investigated in three experiments. In experiment one, employing 12 average ability fourth graders, and experiment two, employing 6 learning disabled intermediate level students, word synonyms were taught to pairs of students on three consecutive days. In experiment three, 10 fourth grade disabled readers received two to four sessions of vocabulary instruction. Children in each condition received different amounts of direct instruction. Experimental children and a no-instruction control group were post-tested on word knowledge and comprehension.

ITEM NUMBER: 256 SHORT TITLE: Jenkins, et al., 1978, Vocabulary and Reading Study

RESEARCHER'S FINDINGS:

Both average and disabled readers learned and retained the greatest number of vocabulary words by "Practice", the treatment involving the greatest amounts of direct instruction. Learning disabled children experienced significant vocabulary growth only in the direct instruction condition. Vocabulary instruction using any of the formats failed to influence comprehension for any of the experimental groups.

RESEARCHER'S CONCLUSIONS:

"Often, teachers devote some time to introducing new vocabulary prior to assigning a reading selection. If the primary interest of this practice is to facilitate their students' comprehension of the forthcoming selection, there may be cause to reexamine this assumption. If the intent of this practice is to help students acquire new vocabulary, then it may be wise to consider a direct instruction format for the vocabulary teaching, especially if the students are unsophisticated or disabled readers."

REVIEWER'S NOTES AND COMMENTS:

None.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 257 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Brophy, J.E. Advances in teacher effectiveness research. Occasional paper No. 18. East Lansing, MI: Michigan State University, Institute for Research on Teaching, 1979. (ERIC/EDRS No. ED 173 340)

DESCRIPTORS: Direct Instruction, Teaching Methods; Class Organization

SHORT TITLE: Brophy, 1979, Teacher Effectiveness Research

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE X DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 [4] 5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a very good review which clearly captures the approaches to, and outcomes of, teacher effectiveness research.

SYNOPSIS:

In this review the author discussed findings emerging from six "large-scale field correlational studies conducted at various elementary levels" and relates these to subsequent correlational, experimental and observational studies conducted with students at other levels.

ITEM NUMBER: 257 SHORT TITLE: Brophy, 1979, Teacher Effectiveness Research

RESEARCHER'S FINDINGS:

"The data from the [elementary level correlational] studies hang together quite well to support Rosenshine's...claim that 'direct instruction' is effective for producing student learning of basic skills...for direct instruction to be effective, teachers must (1) focus on academic goals; (2) promote extensive content coverage and high levels of student involvement; (3) select instructional goals and materials and actively monitor student progress; (4) structure learning activities to include immediate, academically oriented feedback; and (5) create an environment that is task oriented but relaxed."

Classroom management research has shown the effectiveness of instruction which is interactive and highly structured, and has revealed that good management is an essential feature of good instruction.

Research in junior high and high school settings generally replicates the findings emerging from research with younger students and "suggests that direct instruction may be the most effective method at any grade level when mastery of basic skills is the goal."

RESEARCHER'S CONCLUSIONS:

Direct instruction techniques comprise the most effective approach to promoting basic skill competence in students K-12.

Direct instruction may not be the best approach, or even appropriate, for curricular areas that do not involve skill mastery but instead seek to promote appreciation, general familiarity, enrichment, or student personal development.

REVIEWER'S NOTES AND COMMENTS:

A copy of the review may be found in the backup file on Direct Instruction.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 258 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Duran, E. Teaching reading to disadvantaged Hispanic children based on direct instruction. Las Cruces, NM: New Mexico State University, 1980. (ERIC/EDRS No. ED 191 624)

DESCRIPTORS: Direct Instruction

SHORT TITLE: Duran, 1980, Hispanic Reading Study

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT _X_ IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE _X_ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a nice, small-scale study, although student exposure to treatment was minimal.

SYNOPSIS:

This study compared the effects of a direct instruction* bilingual reading approach with those produced by a regular bilingual program approach. Participants included 116 first graders in two Southwestern schools. At each school, half the participants were assigned to the direct instruction condition and half to the regular bilingual instruction setting. Four graduate students, two trained in bilingual education and two trained in direct instruction, provided one hour of reading instruction per week for eight consecutive weeks. The same content was covered in all classes. Children were post-tested on their reading mastery of vowels and recognition of geometric shapes using a test developed by the researcher.

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*Direct instruction was defined as an instructional approach based on the work of Engleman, Bereiter, Carnine, etc., and involving the use of modeling, reinforcement, prompting, discrimination learning and correction/feedback for positive self-concept development.

ITEM NUMBER: 258 SHORT TITLE: Duran, 1980, Hispanic Reading Study

RESEARCHER'S FINDINGS:

When all participants were considered, direct instruction students achieved significantly higher than regular bilingual instruction students. When the schools were considered separately, the direct instruction students' greater achievement was very significant at one school and nonsignificant at the other.

RESEARCHER'S CONCLUSIONS:

"...instruction based on principles of direct instruction can improve beginning bilingual childrens' achievement significantly more than that of regular bilingual instruction... Bilingual education may be enhanced by incorporating direct instruction into its teaching method. The positive effects of direct instruction apply to children from lower as well as from middle SES family backgrounds."

The researcher recommends that more direct instruction bilingual materials be developed; that careful assessment/diagnosis procedures be followed; and that subjects such as math and reading be the focus of direct instructional approaches, as these require repetition and memory.

REVIEWER'S NOTES AND COMMENTS:

A copy of this report may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 259 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Becker, W.C., & Gersten, R. A follow up of Follow Through: The later effects of the Direct Instruction Model on children in fifth and sixth grades. Washington, D.C.: USOE, April 1981. (ERIC/EDRS No. ED 202 601)

DESCRIPTORS: Direct Instruction

SHORT TITLE: Becker & Gersten, 1981, Later Effects of DIFT

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT _X_ IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE _X_ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ____

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 [4] 5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a good analysis which clearly demonstrates the effects of the instructional approach.

SYNOPSIS:

In this paper, the authors report the results of two studies concerning the later effects of Direct Instruction Follow Through (DIFT) participation. In the first study 624 fifth and sixth graders, who had participated in DIFT programs as primary students, were compared with 567 non-Follow Through students from similar backgrounds. In the second study, 473 fifth and sixth grade Follow Through graduates were compared with 403 non-Follow Through children. Participating students represented black, white and Hispanic populations and came from both urban and rural areas. Children were tested using the Metropolitan Achievement Test (Intermediate) and the Wide Range Achievement Test. Scores of DIFT participants were compared with non-DIFT children from the same area. Scores were also compared with national norms.

ITEM NUMBER: 259 SHORT TITLE: Becker & Gersten, 1981, Later Effects of DIFT

RESEARCHER'S FINDINGS:

When compared with non-DIFT participants, DIFT children had consistently higher scores on reading decoding, spelling and math problem solving. Effects for other areas tested also favored DIFT children, but more moderately. "Overall, there is reasonable evidence of significant later effects..."

"There are two basic findings to this study. The first is that there is evidence that in most domains assessed by standardized achievement tests, low income graduates of a three-year Direct Instruction Follow Through program perform better than comparable children in comparison groups in their communities who did not attend the program... The second finding is less optimistic. When compared to the national norm sample, these children invariably lose ground in the three years after they have Follow Through."

RESEARCHER'S CONCLUSIONS:

Two main conclusions are drawn: (1) if students learn skills and problem solving strategies well, they do not lose this knowledge, and (2) without effective instruction which continues to build on these skills in the intermediate grades, the children are likely to lose ground with regard to their middle-income peers.

REVIEWER'S NOTES AND COMMENTS:

None.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 260 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: O'Donnell, R.C., & Smith, N.L. Use of an instructional module to heighten awareness of syntactic structure. Studies in Language Education, Report No. 3. Athens, GA: Georgia University Department of Language, June 1973. (ERIC/EDRS No. ED 077 026)

DESCRIPTORS: Direct Instruction

SHORT TITLE: O'Donnell & Smith, 1973, Syntactic Structure

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS X

RELEVANT ___ IRRELEVANT X FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

SYNOPSIS:

A direct instructional approach was used to increase student sensitivity to syntactic structure. As this awareness was not related to other reading skills or to overall reading achievement, this study falls outside the scope of the present review.

ITEM NUMBER: 260 SHORT TITLE: O'Donnell & Smith, 1979, Syntatic Structure

RESEARCHER'S FINDINGS:

RESEARCHER'S CONCLUSIONS:

REVIEWER'S NOTES AND COMMENTS:

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 261 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Gersten, R., & Carnine, D. Direct Instruction Mathematics: Longitudinal evaluation of over 2,000 low-income children. Paper presented at the Annual Meeting of the American Educational Research Association, Los Angeles, CA, April 1982.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Gersten & Carnine, 1981, Direct Instruction Math

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE X DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 [4] 5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a very good presentation of the findings emerging from the Follow Through evaluation.

SYNOPSIS:

This report focuses on those results of the Project Follow Through longitudinal evaluation which have to do with the effects of the Direct Instruction Follow Through model on the math achievement of the more than 2,000 low SES students who were instructed with it. The participating children represented a wide variety of racial/ethnic backgrounds and were from both urban and rural areas. Half had been instructed in Distar Arithmetic during their K-3 school years, and half during grades 1-3. Comparison school instructional techniques varied. Distar Math instruction took place for 30 minutes each day, with a teacher or paraprofessional working with groups of 6-10. After program participation, Distar students' achievement and self-concept scores were compared with those of non-Distar students. Methods of compairson included: (1) comparison by independent evaluations of Distar students with local and pooled national comparison groups; (2) norm referenced comparisons on various mathematics subtests; and (3) self-concept measures.

ITEM NUMBER: 261 SHORT TITLE: Gersten & Carnine, 1981, Direct Instruction Math

RESEARCHER'S FINDINGS:

"Of the ten major education approaches evaluated, students in the Direct Instruction model performed highest in all areas of Math--Computations... Problem Solving...and Concepts."

Direct Instruction students also had the highest self-concepts of all Follow Through students evaluated.

RESEARCHER'S CONCLUSIONS:

"Low socioeconomic primary grade students who received Direct Instruction tended to perform better in math than students who received other approaches... Direct Instruction students achieved at a level much higher than one would predict based on their demographic characteristics and performance upon entering school."

REVIEWER'S NOTES AND COMMENTS:

None.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 262 LOCATION: NWREL Info. Center/ Periodicals (MF)

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Calfee, R.C. & Piontkowski, D.C. The reading diary: Acquisition of decoding. Reading Research Quarterly, 1981, 16, 346-373.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Calfee & Piontkowski, 1981, Reading Diary

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This study was well done and its findings were clearly presented.

SYNOPSIS:

This study examined the means by which reading subskills are acquired and yielded findings about methods which appear most effective for helping children acquire these subskills. Fifty first graders from four schools were selected based on (1) initial inability to read, but (2) likelihood of learning beginning reading skills by the end of first grade. Participating students represented various social/ethnic groups and were from low-to-moderate-income neighborhoods. Four reading curricula were used, ranging from highly structured approaches to flexible, variable ones. Standardized skill tests were administered to students, as well as research-developed tests in the areas of decoding, oral reading and comprehension.

ITEM NUMBER: 262 SHORT TITLE: Calfee & Piontkowski, 1981, Reading Diary

RESEARCHER'S FINDINGS:

Students in the programs which emphasized reading for meaning performed better on reading passages than on reading isolated words. Students in programs which emphasized phonics were most proficient on decoding tests, though some did not perform well in reading passages.

Students in the direct, highly structured instructional approaches outperformed those students instructed in other ways.

Other findings are presented on the relationships among the various reading subskills measured.

RESEARCHER'S CONCLUSIONS:

"Children learn what they are taught," i.e., students whose instructional program emphasized a certain subskill performed best on tests concerned with that subskill.

"Children learn more when teaching is direct and structured."

REVIEWER'S NOTES AND COMMENTS:

None.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 263 LOCATION: NWREL Info. Center/ Periodicals (MF)

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Becher, R.M. Teacher behaviors related to the mathematical achievement of young children. Journal of Educational Research, 1980, 73, 336-340.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Becher, 1980, Teacher Behavior & Math Achievement

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 [2] 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

Problems of definition mar the clarity of this study's findings and conclusions.

SYNOPSIS:

This study examined relationships between teacher behaviors and the mathematics of four- and five-year old children. Each of eight instructors taught 12 lessons of 10-15 minutes duration to three groups of children. Tape recordings of the lessons were analyzed to identify the different approaches used by the instructors, and these approaches were analyzed in relation to the achievement of the students.

ITEM NUMBER: 263 SHORT TITLE: Becher, 1980, Teacher Behavior & Math Achievement

RESEARCHER'S FINDINGS:

The analysis revealed that "the more active involvement of the student in the learning process, through the use of indirect teaching behaviors and a substantive interactive instructional strategy, is significantly more effective in facilitating mathematical achievement in young children than in a direct instruction and drill teaching mode."

There was also a significant negative relationship between the teachers' provision of feedback by his or her indication of the correctness of a response and student achievement.

RESEARCHER'S CONCLUSIONS:

The researcher points out that the behaviors which, collectively, are termed "indirect" in this study are attributes of "direct instruction" as that term is used by many other researchers. "Therefore, the results of the present study may be considered consistent or inconsistent with the current literature [supporting direct instruction], depending on how narrowly or how broadly 'direct instruction' is defined."

REVIEWER'S NOTES AND COMMENTS:

None.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 264 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Meyer, R., & Cohen, S.A. A study of general reading compared to direct instruction to increase vocabulary development. Reading World, 1975, 15, 109-113.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Meyer & Cohen, 1975, General Reading vs. Direct Instruction

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

The treatment period was short, but the study convincingly demonstrated the efficacy of general reading for this group of students.

SYNOPSIS:

This study examined the relative effects of heavy general reading and direct vocabulary instruction on the vocabulary development of the 150 participating fourth graders. Subjects were drawn from four schools and represented the multi-ethnic Title I population of the Omaha Public Schools. Half the participants received direct instruction in vocabulary building and half engaged in periods of tradebook reading. Students participated in these activities for 60 hours during a four-month period, after which two vocabulary achievement subtests were administered to the 120 students available at post-testing time.

ITEM NUMBER: 264 SHORT TITLE: Meyer & Cohen, 1975, General Reading vs. Direct Instruction

RESEARCHER'S FINDINGS:

There was no difference in vocabulary achievement as measured on norm referenced standardized tests between the vocabulary instruction group and the heavy tradebook reading group.

RESEARCHER'S CONCLUSIONS:

"Time spent on individual tradebook reading as a basal core of classroom reading instruction at the expense of time spent on vocabulary drills will probably not hurt vocabulary growth. It may, in fact, help it."

REVIEWER'S NOTES AND COMMENTS:

A copy of the article may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 265 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Oliver, M.E. The effect of high-intensity practice on reading comprehension. Reading Improvement, 1973, 10 (2), 16-18.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Oliver, 1973, High Intensity Practice

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 [2] 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

The sample was small and the treatment time short. Also, because the "direct" (control) method was not described in much detail, it is difficult to know if this method approximates "direct instruction" as that term is used in other investigations.

SYNOPSIS:

The purpose of this study was to determine whether a portion of curriculum time devoted to a quiet reading practice period could improve reading comprehension as effectively as time devoted to direct instruction during one month of daily reading periods. Forty-eight students in grades 4, 5 and 6, who were identified as average readers and who represented an ethnic and economic cross-section of their school, were divided into two groups. The high-intensity practice group were involved in gradually lengthening periods of sustained silent reading, writing and self-selected activities. The control group participated in an intensive directed reading program using basal readers and workbooks. In the control class one teacher worked with the seven lowest-achieving readers, while another teacher taught the rest of the class. Students were pre- and post-tested by researchers.

ITEM NUMBER: 265 SHORT TITLE: Oliver, 1973, High Intensity Practice

RESEARCHER'S FINDINGS:

Reading comprehension test scores indicated that both groups made significant reading gains.

"While the differences in raw score or standard score means between groups was not statistically significant, gains favored the High Intensity Practice group by one month in grade scores."

RESEARCHER'S CONCLUSIONS:

"The gain in reading comprehension of the HIP group supports the value of including High Intensity Practice in the balanced reading program."

REVIEWER'S NOTES AND COMMENTS:

A copy of the report may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 266 LOCATION: Info. Center/Periodicals

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Becker, W.C. Teaching reading and language to the disadvantaged - What we have learned from field research. Harvard Educational Review, 1977, 47, 518-543.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Becker, 1977, Field Research on Reading

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS X

RELEVANT ___ IRRELEVANT X FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

SYNOPSIS:

This is another review of findings from the Project Follow Through longitudinal evaluation which indicated the superiority of the Direct Instruction Model for teaching basic skills. Findings from this evaluation may be found in Item Nos. 250, 259 and 261.

ITEM NUMBER: 266 SHORT TITLE: Becker, 1977, Field Research on Reading

RESEARCHER'S FINDINGS:

RESEARCHER'S CONCLUSIONS:

REVIEWER'S NOTES AND COMMENTS:

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 267 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Freedman, P.I., Gotti, M., & Holtz, G. In support of direct teaching to counter ethnic stereotypes. Phi Delta Kappan, 1981, 62, 456.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Freedman, et al., 1981, Countering Ethnic Stereotypes

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 [2] 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

Detail on the study is sparse. Also, a reduction in student inclination to hold stereotypes may not be a valued student outcome from everyone's point of view.

SYNOPSIS:

The purpose of this study was to examine the relationships between three different approaches to teaching about prominent representatives of various ethnic groups and the degree to which students held ethnic stereotypes. Four control classes studied prominent ethnic group representatives using materials that could reinforce stereotypes (i.e., they studied black athletes, Jewish bankers, etc.). Two experimental classes studied prominent people whose areas of prominence did not reinforce stereotypes (i.e., they studies Puerto Rican playwrights, Polish-American intellectuals and businessmen, etc.). Two other experimental classes also studied these "counterstereotypic" individuals and, in addition, were instructed on the topic of stereotypes--how they develop, why they are harmful, how they can be changed, etc. Each participating teacher taught one control class and one experimental class. Instruction took place over a 7-10 day period, after which all children completed an instrument which revealed their agreements and disagreements with a series of stereotypic statements.

ITEM NUMBER: 267 SHORT TITLE: Freedman, et al., 1981, Countering Ethnic Stereotypes

RESEARCHER'S FINDINGS:

There were no differences between control students and those experimental students whose biographical study content was counterstereotypic. However, those experimental students who used counterstereotypic biographical materials and received direct instruction on the topic of stereotypes were far less inclined to agree with stereotypic statements then either of the other two groups. This was true with regard to both the ethnic groups they had studied and those they had not. "A substantial number of students who had directly studied stereotyping also wrote messages in the margins of their posttests deploring generalizations about groups."

RESEARCHER'S CONCLUSIONS:

"To attain [the] goal [of reducing or eliminating stereotypic thinking about groups], teachers must help youngsters recognize stereotypes and understand their harmful effects. Merely exposing students to nonstereotyped ethnic role models is not enough..."

REVIEWER'S NOTES AND COMMENTS:

A copy of the article may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 268 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Wicker, P.L., & Tyler, J.L. Improving locus of control through direct instruction: A pilot study. Education and Training of the Mentally Retarded, 1975, 10, 15-18.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Wicker & Tyler, 1975, Improving Locus of Control

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This study had a modest scope, but convincingly demonstrates that the results obtained were due to the experimental treatment.

SYNOPSIS:

The purpose of this study was to determine whether retarded children could learn adaptive behaviors and awareness of behavioral consequences as a result of a sequential instructional program. Thirty educable mentally retarded students of intermediate school age in two classes comprised the sample. All children had trouble understanding that the rewards or punishments they received were related to the behavior they exhibited. The control class experienced a traditional EMR curriculum, with no special instruction in behavior-outcome relationships. In the experimental class, 30-minute sessions were held each day for 12 weeks, in which behavior-outcome relationships were directly taught. Using many of the same methods which comprise direct instruction for regular education students (structured activities, much teacher-student interaction, immediate teacher feedback), experimental students were taught that inappropriate behaviors bring on negative consequences and appropriate behaviors result in material rewards and positive relationships with others. Students in both groups were tested with instruments designed to measure understanding of the relationship between behaviors and outcomes.

ITEM NUMBER: 268 SHORT TITLE: Wicker & Tyler, 1975, Improving Locus of Control

RESEARCHER'S FINDINGS:

Experimental students scored higher than control on both measures used.

In addition, the experimental teacher made very positive comments about the program's effect on her students' behavior and social awareness.

RESEARCHER'S CONCLUSIONS:

While acknowledging that this modest study does not lead to final conclusions, the author states that the study suggests "that retarded children can profit from direct instruction on the causal factors of behavior."

Recommendation for further research are offered.

REVIEWER'S NOTES AND COMMENTS:

A copy of the report may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 269 LOCATION: PSU Library

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Grusec, J.E., Kuczynski, J.P.R., & Simutis, Z.M. Modeling direct instruction, and attributions: Effects on Altruism. Developmental Psychology, 1978, 14, 51-57.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Grusec, et al., 1978, Altruism

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS X

RELEVANT ___ IRRELEVANT X FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

SYNOPSIS:

Direct instruction is used in this study to mean issuing directives. As such, it is outside the scope of the present analysis.

ITEM NUMBER: 269 SHORT TITLE: Grusec, et al., 1978, Altruism

RESEARCHER'S FINDINGS:

RESEARCHER'S CONCLUSIONS:

REVIEWER'S NOTES AND COMMENTS:

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 270 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Corno, L., Mitman, A., & Hedges, L. The influence of direct instruction on student self-approvals: A hierarchical analysis of treatment and aptitude-treatment interaction effects. American Educational Research Journal, 1981, 18, 39-61.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Corno, et al., 1981, Student Self Apprisals

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 [4] 5 (Strong)

BRIEF DISCUSSION OF RATING:

A good, strong study on affective results of direct instruction.

SYNOPSIS:

This is the report of a study which examined the effect on student self-appraisals produced by different degrees of direct instruction. Thirty-three teachers and their 634 third graders participated. Teachers were divided into groups and (1) received intensive training in a program designed to increase their capacity to provide direct instruction;* (2) received minimal training in this area; or (3) received no training in this area. Each student, in addition to receiving instruction from teachers in one of the above categories, either (1) were instructed by their parents in classroom behavior skills (reviewing, stating goals, volunteering, etc.), or (2) were not so instructed. In October and in May of the 1976-77 school year students completed four self-appraisal instruments--a self-esteem measure, an attitude-toward-school inventory, an anxiety questionnaire and a scale which measured locus of control.

*The teacher training program included content in behavior management, general instructional methods and questioning and feedback techniques.

ITEM NUMBER: 270 SHORT TITLE: Corno, et al., 1981, Student Self Appraisals

RESEARCHER'S FINDINGS:

Both minimal and intensive teacher training produced more positive self-appraisals than no training. When a student worked with a teacher who had experienced either minimal or intensive training and received parent instruction in the home, results were more positive still. Of the two kinds of treatment, parent instruction had a more powerful positive effect on self-appraisal scores than working with a trained teacher.

RESEARCHER'S CONCLUSIONS:

"To those who study variations on 'direct instruction'...results suggest the treatments used here can leave positive effects on student self-appraisals."

REVIEWER'S NOTES AND COMMENTS:

A copy of the article may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 271 LOCATION: NWREL Info. Center/Periodicals

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Evertson, C.M., Anderson, C.W., Anderson, L.M. & Brophy, J.E. Relationships between classroom behaviors and student outcomes in junior high mathematics and English classes. American Educational Research Journal, 1980, 17, 43-60.

DESCRIPTORS: Direct Instruction, Instructional Grouping, Time Factors (Learning)

SHORT TITLE: Evertson, et al., 1980, Jr. High Math & English

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 [4] 5 (Strong)

BRIEF DISCUSSION OF RATING:

This was a very well-designed and conducted correlational study.

SYNOPSIS:

This study sought to identify relationships between the classroom behaviors of junior high school teachers and the achievement and affective outcomes exhibited by their students. Sixty-eight teachers (39 English and 29 mathematics) were observed in nine junior high schools, and their behaviros were recorded using a subjective and an objective scale. Two sections were observed for each teacher. The two student outcome measures used were an achievement test designed to reflect the subject matter taught that year (1974-75) in the mathematics and English classes, and a 9-item Likert-scale questionnaire measuring student attitudes toward their teachers.

ITEM NUMBER: 271 SHORT TITLE: Evertson, et al., 1980, Jr. High Math & English

RESEARCHER'S FINDINGS:

Teachers' academic competence (as determined by their students' achievement) played a part in the students' ratings of mathematics teachers, but not English teachers.

There were no significant associations between observed rates of student misbehavior and student outcomes.

The more successful math teachers spent more time in class discussion or lecture...and response opportunities formed a greater portion of their contact with students. Their private contacts with students were as frequent as those of the English teachers. No significant relationships were found between public or private interaction styles and student outcomes in English, though students preferred teachers with whom they had private contacts.

More successful math teachers asked more questions of all types. No relationships were noted in the English class.

Teachers who relied on calling on volunteers had classes with higher achievement gains in math generally and in lower-ability English classes. Positive teacher feedback was positively associated with achievement. Teacher encouragement of student questions, opinion giving, etc., was positively associated with student attitudes.

RESEARCHER'S CONCLUSIONS:

"In mathematics classes, the results form a consistent picture of the practices of 'good' teachers... The more effective teachers were active, well-organized and strongly academically oriented. They tended to emphasize whole class instruction, but with some time also devoted to seatwork. They managed their classes efficiently, and tended to 'nip trouble in the bud,' stopping a disturbance before it could seriously disrupt the class. They asked many questions during class discussions... They were also rated as more enthusiastic, nurturant and affectionate... This description of good mathematics teachers is very similar to Rosenshine's...description of direct instruction [see Item No. 153].

"The results in English classes yielded fewer consistent patterns and these were generally limited to one of the two criterion measures rather than both."

REVIEWER'S NOTES AND COMMENTS:

A copy of this report may be found in the Direct Instruction backup file.

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SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 272 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Au, K.H. The comprehension-oriented reading lesson: Relationships to proximal indices of achievement. Paper presented at the Annual Meeting of American Educational Research Association, Boston, MA, April 1980. (ERIC/EDRS No. ED 193 602)

DESCRIPTORS: Direct Instruction

SHORT TITLE: Au, 1980, Comprehension-Oriented Reading

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS X

RELEVANT ___ IRRELEVANT X FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

SYNOPSIS:

This study compared teacher behavior with student behavior, not with student outcomes. It involved one class of second graders and two teachers.

ITEM NUMBER: 272 SHORT TITLE: Au, 1980, Comprehension-Oriented Reading

RESEARCHER'S FINDINGS:

RESEARCHER'S CONCLUSIONS:

REVIEWER'S NOTES AND COMMENTS:

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 273 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Haisley, F.B., & Perino. L. Direct instruction of reading experiences in "K"indergarten as a transition. Paper presented at the Annual Meeting of the International Reading Association, Miami Beach, FL, May 1977. (ERIC/EDRS No. ED 137 744)

DESCRIPTORS: Direct Instruction

SHORT TITLE: Haisley & Perino, 1977, "K"indergarten Study

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT _X_ IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE _X_ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

While modest in scope, this study clearly demonstrated the ability of direct skill-building activities for promoting later reading achievement.

SYNOPSIS:

This study compared the reading achievement of kindergarten students who were instructed with a language experience approach for developing pre-reading skills with that of other kindergarten children whose language arts instruction also included: (1) activities related to auditory and visual memory and discrimination, and (2) direct, formal instruction in phonics and other specific pre-reading skills. There were eight control classes (language experience approach only) and two experimental classes. At the end of the year, students completed the California Test of Basic Skills (CTBS) Reading Achievement Test.

ITEM NUMBER: 273 SHORT TITLE: Haisley & Perino, 1977, "K"indergarten Study

RESEARCHER'S FINDINGS:

Students in the experimental classrooms scored (as a group) at the 72 percentile on the CTBS reading tests; control students at the 52 percentile.

RESEARCHER'S CONCLUSIONS:

"The program proved to be very successful."

REVIEWER'S NOTES AND COMMENTS:

The program (called DIRECT) was developed in response to local concern about reading achievement and was based on research which (1) indicated the effectiveness of direct procedures and (2) questioned the effectiveness of the language experience approach because of its "overemphasis on unsystematic process and less on systematic skill development."

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 274 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Gersten, R., Direct instruction programs in special education settings: A review of evaluation research findings. Paper presented at the Annual Conference of the Council for Exceptional Children, New York, NY, April 1981. (ERIC/EDRS No. ED 204 957)

DESCRIPTORS: Direct Instruction

SHORT TITLE: Gersten, 1981, Distar in Special Education

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE X DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 [4] 5 (Strong)

BRIEF DISCUSSION OF RATING:

This review presents the salient features of many major evaluation and documentation efforts with special education students receiving instruction in Distar programs. The findings are clearly and convincingly presented.

SYNOPSIS:

In this paper the author presents a review of evaluation findings emerging from the use of the Direct Instruction Model program (Distar Reading, Language and Mathematics) with various special education populations. The review is organized according to the kinds of evaluation designs used (experimental, quasi-experimental, etc.).

ITEM NUMBER: 274 SHORT TITLE: Gersten, 1981, Distar in Special Education

RESEARCHER'S FINDINGS:

In general, the evaluation reviewed indicated that the Distar programs were highly successful in enhancing the basic skill achievement of special education students. These favorable results were obtained with different kinds of research approaches, with different kinds of special education students, in different basic skill areas, in both mainstreamed and self-contained settings, and by researchers in both the U.S. and other countries. Selected examples include:

a study in which severely retarded children using Distar Language I scored significantly higher than control children on intellectual growth measures

a study of learning disabled students who worked with Distar Reading and outperformed control students on decoding and comprehension measures

a study in which children with "minimal brain disfunction" were instructed with Distar Reading or with the Palo Alto Reading Program and which showed significant, positive effects favoring Distar

a study in which Distar Language and Distar Reading were used with the moderately retarded and which revealed significant student growth in IQ, reading and language arts.

RESEARCHER'S CONCLUSIONS:

"Generally, a quite optimistic picture emerges."

The author concludes his report with suggestions for the design of future evaluation research.

REVIEWER'S NOTES AND COMMENTS:

A copy of the review may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 275 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Pany, D., & Jenkins, J.R. Learning word meanings: A comparison of instructional procedures and effects on measures of reading comprehension with learning disabled students. Technical Report No. 25. Cambridge, MA: Bolt, Baranek and Newman; Urbana, IL: Illinois University, Center for the Study of Reading, 1977. (ERIC/EDRS No. ED 136 237)

DESCRIPTORS: Direct Instruction

SHORT TITLE: Pany & Jenkins, 1977, LD Comprehension Study

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 [2] 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

The sample was small and the treatment time very limited. Still, the study gives indications of the different effects of different instructional approaches with learning disabled children.

SYNOPSIS:

This study compared the effects of three vocabulary instruction methods on reading comprehension. Each of six learning disabled students in grades 4 and 5 were instructed in each of the following ways: (1) reading a story and being expected to infer word meanings from context; (2) having word meanings explained to them as they read a story; and (3) practicing reciting word meanings and then reading a story containing these words. After each treatment, students were tested on two aspects of reading comprehension; recalling word meanings and recalling facts from the story they read.

ITEM NUMBER: 275 SHORT TITLE: Pany & Jenkins, 1977, LD Comprehension Study

RESEARCHER'S FINDINGS:

Students in the second (word meanings explained) condition outperformed students in the first (word meanings inferred) condition, but differences were not significant. Students in the third (word meanings practiced) condition significantly outperformed first- and second-condition students on recall of word meanings, but not on recall of story facts. All three treatments produced about the same effect on recall of facts.

RESEARCHER'S CONCLUSIONS:

"Results indicated that as emphasis on direct instruction of word definitions increased so did performance on vocabulary measures."

Further research is recommended.

REVIEWER'S NOTES AND COMMENTS:

None.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 276 LOCATION: NWREL Info. Center

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Stallings, J. What research has to say to administrators of secondary schools about effective teaching and staff development. In Duckworth, K., et al., (Eds.). Creating Conditions for Effective Schooling: Conference Proceedings. Eugene, OR: University of Oregon College of Education, Division of Educational Policy and Management, 1981.

DESCRIPTORS: Direct Instruction, Teaching Methods, Inservice Teacher Education

SHORT TITLE: Stallings, 1981, Secondary Research Review

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE X DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 [4] 5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a very good research summary with a clear presentation of practical applications for the findings emerging from the research.

SYNOPSIS:

In this paper the author presents a review of recent research on effective school practices at the secondary level, together with the implications of that research for school policies and staff development. Research findings on a wide range of instructional and class management topics are presented.

ITEM NUMBER: 276 SHORT TITLE: Stallings, 1981, Secondary Research Review

RESEARCHER'S FINDINGS:

First day organization and planning: Successful teachers began the school year by making rules, consequences and procedures clear, established a system of student accountability, and commenced instructional activities.

Time factors: Successful teachers managed class time so that many of the activities were interactive and several kinds of activities were conducted in a given class period. Less successful teachers had students spend large amounts of time on seatwork (written assignments or silent reading).

Interactive supportive instruction: Successful teachers provided oral instruction for new work, discussed and reviewed students' work, provided drill and practice, asked questions, acknowledged correct responses and supportively corrected wrong responses. These teachers worked to include all students in discussion and review.

Focus of instruction: Research supports the use of small group or whole class instruction in preference to individualized instruction, which tends to be largely noninteractive.

Absenteeism, tardiness, intrusions and other interruptions of instructional continuity were found to be negatively related to achievement. Large classes were not beneficial, especially for remedial students.

RESEARCHER'S CONCLUSIONS:

"Teachers need to be interactive and directly involved with students to keep them on-task.

Teachers should distribute questions to all members of the class and be supportive and guiding in their feedback.

Teachers should offer several activities during a class period so that students can develop listening, speaking, reading and writing skills...

Teachers need a well-focused, comprehensive, continuous staff development program...

Schools should keep distractions that intrude upon classroom time to a minimum.

Schools should have a consisent and enforced policy for absences, tardiness, and misbehavior.

Schools should gain parent participation and support..."

REVIEWER'S NOTES AND COMMENTS:

None.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 277 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Schneider, E.J. School improvement is possible now, really! Washington D.C.: Council for Educational Development and Research, May 1979.

DESCRIPTORS: Direct Instruction, Class Organization

SHORT TITLE: Schneider, 1979, School Improvement

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE X DISSERTATION ABSTRACT ____

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This review does not offer detail on the research studies examined. It is, nevertheless, a clear and well-organized summary.

SYNOPSIS:

This paper offers criticisms of the approaches taken by federal agencies and some of the educational research and development institituions they support to addressing school improvement issues. The author claims that, in contrast to the opinions held by many, we do know a great deal about what fosters school improvement, which is defined as involving "school personnel working with school children to ensure the latter's achievement of district-adopted learning goals." The appendix to this paper is an overview of research findings about practices which foster school improvement. Products are referenced which have been developed by federally supported research and development labs and centers and which are consistent with the research findings cited.

ITEM NUMBER: 277 SHORT TITLE: Schneider, 1981, School Improvement

RESEARCHER'S FINDINGS:

Research reviewed by the author relates to instruction in the primary grades and to effective classroom management. Major findings include:

"...that direct instruction* is associated with increased learning gains is a common, almost universal conclusion of recent research...

"...the teachers most successful in managing their classrooms are more alert in monitoring the students and more aware of what is going on at all times; able to sustain one activity while doing something else at the same time, and able to maintain continuity without unnecessary interruptions or confusion." These good managers, in turn, tend "to produce greater learning gains in their students on standardized achievement tests."

RESEARCHER'S CONCLUSIONS:

"As a result of programmatic r&d [research and development] over the past 15 years, the labs and centers can say with confidence that we know: (1) principles of effective instruction in the primary grades, and (2) what teachers need to do to run orderly classrooms."

REVIEWER'S NOTES AND COMMENTS:

*The author's comments pertain to direct instruction as described by Rosenshine and Berliner (1978): "(1) academically focused teaching activities where goals are clear to students; (2) sufficient and continuous time allocated to instruction; (3) extensive content coverage; (4) careful monitoring of students' performance; (5) low cognitive level questions that produce many correct responses; (6) immediate and academically oriented feedback; and (7) structured interaction between teacher and students in a convival academic atmosphere."

A copy of the paper may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 278 LOCATION: Project Files

REVIEWER: W.G. Savard DATE REVIEWED: February 1982

CITATION: Cotton, K. Effective practices for spelling instruction. Portland, OR: Northwest Regional Educational Laboratory, January 1982.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Cotton, 1982, Effective Spelling Instruction

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT _X_ IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE _X_ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

Although it drew on sources other than research studies, this review was quite complete and was consistent with major research findings and literature reviews in this area.

SYNOPSIS:

This review of research studies and instructional theory was undertaken in order to identify instructional practices which have been shown to be effective for teaching spelling skills to students, K-12. Research on instructional methods is cited, along with commentary on the divergence between research and practice.

ITEM NUMBER: 278 SHORT TITLE: Cotton, 1982, Effective Spelling Instruction

RESEARCHER'S FINDINGS:

Components of effective spelling instruction include: (1) instruction in phonics; (2) instruction in those spelling rules which apply to large numbers of words; (3) presenting spelling words in list form for initial learning; (4) emphasis on words which are frequently used in spoken and written language; (5) integration of spelling instruction with other language arts activities; (6) emphasis on spelling only during spelling lessons for beginning spellers (misspellings should be tolerated in creative writing activities); (7) instruction which is direct, systematic and ongoing--not incidental; (8) use of the test-study-test method; (9) having students correct their own misspellings; (10) supplementary use of aids such as typewriters and computers; and (11) individualized instruction.

RESEARCHER'S CONCLUSIONS:

As concerns instructional approach, the conclusion offered is that "While 'support has been voiced for a purely incidental approach to spelling since the latter part of the nineteenth century'...it should be obvious from the literature summarized...that the vast majority of educators and researchers favor the use of systematic spelling instruction."

REVIEWER'S NOTES AND COMMENTS:

A copy of the report may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 279 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Good, T.L. Teacher effectiveness in the elementary school. Journal of Teacher Education, 1979, 30 (2), 52-64.

DESCRIPTORS: Direct Instruction, Teaching Methods

SHORT TITLE: Good, 1979, Elementary Teacher Effectiveness

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE X DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 4 [5] (Strong)

BRIEF DISCUSSION OF RATING:

This excellent review cites and synthesizes the results of many good research studies on direct instructional techniques and other areas of teacher effectiveness. Relationships not commented on by other reviewers are noted and explicated in this article.

SYNOPSIS:

This is a review of a wide range of process-product research conducted during the 1970s on the relationship between teacher behavior and student achievement. Defining teacher effectiveness as "the ability of a classroom teacher to produce higher than predicted gains on standardized achievement tests," (because this is the area which has been most thoroughly researched), the author identifies and comments on the findings of more than 50 studies. His review proceeds from the observation that "naturalistic research supporting the concept of direct instruction began with the identification of teachers who were obtaining good student achievement gains." From this point, he describes the kinds of inquiries which have been conducted regarding the direct instruction and classroom management aspects of teacher effectiveness. How and why validated teaching approaches affect achievement are analyzed.

ITEM NUMBER: 279 SHORT TITLE: Good, 1979, Elementary Teacher Effectiveness

RESEARCHER'S FINDINGS:

In contrast to studies conducted in the 1950s and 1960s indicating that schools are relatively ineffectual influences on student achievement by comparison with social and economic influences, more recent research overwhelmingly indicates that teachers, in particular, have a tremendous influence on student achievement.

"Teachers' managerial abilities have been found to relate positively to student achievement in every process-product study conducted to date...managerial skills [are] a necessary but not sufficient condition for classroom effectiveness."

"That direct instruction is associated with increased learning gains is a common, almost universal conclusion of recent research."

RESEARCHER'S CONCLUSIONS:

"(a) elementary school teachers do exert differential effects upon student achievement; (b) classroom management skills are exceedingly important; and (c) a pattern of teaching behavior called direct instruction seems to be a useful heuristic for describing effective elementary classroom teachers."

REVIEWER'S NOTES AND COMMENTS:

The author's definition of direct instruction, based on the studies he reviewed, is consistent with the Berliner-Rosenshine descriptions; that is, only a few degrees less structured than the highly formal instructional approach of the Distar programs. After citing the Rosenshine definition, he writes, "When I use the term direct instruction, the image I have is active teaching. A teacher sets and articulates the learning goals, actively assesses student progress and frequently makes class presentations illustrating how to do assigned work..."

A copy of the paper may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 280 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Becker, W.C., & Carnine, D.W. Direct Instruction: An effective approach to educational intervention with disadvantaged and low performers. In Lahey, B.B., & Kazdin, A.E. (Eds.). Advances in Clinical Child Psychology. New York, NY: Plenom Publishing Corporation, 1980.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Becker & Carnine, 1980, Direct Instruction Follow Through

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS X

RELEVANT ___ IRRELEVANT ___ FOR PRESENT PURPOSE (See Synopsis)

PRIMARY SOURCE ___ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

SYNOPSIS:

This is a very complete discussion of the findings of the Project Follow Through evaluation which found the University of Oregon Direct Instruction model to be superior to other Follow Through models and to non-Follow Through instruction for promoting basic skill development among the disadvantaged. Applications of this instructional method with learning disabled students are discussed and a case made for the advantages of Direct Instruction with such children. While the Follow Through data are highly relevant to the current inquiry, these have been reported in other Item Reports (Nos. 250, 259 & 261) and are not repeated here. This chapter is very much worth reading, however, and may be found in the Direct Instruction backup file.

ITEM NUMBER: 280 SHORT TITLE: Becker & Carnine, 1980, Direct Instruction Follow Through

RESEARCHER'S FINDINGS:

RESEARCHER'S CONCLUSIONS:

REVIEWER'S NOTES AND COMMENTS:

See the Direct Instruction backup file for a copy of this chapter.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 281 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Carnine, D.W., & Engelmann, S. The Direct Instruction Model (1982, in press).

DESCRIPTORS: Direct Instruction

SHORT TITLE: Carnine & Engelmann, 1982, Direct Instruction Operation

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS X

RELEVANT ___ IRRELEVANT X FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

SYNOPSIS:

In this paper the authors discuss the Direct Instruction model as it really operates in the schools which have implemented it. Program components are discussed, as are the resources required for implementation and problems which have been encountered in program operations. It is not a study or review.

ITEM NUMBER: 281 SHORT TITLE: Carnine & Englemann, 1982, Direct Instruction Operations

RESEARCHER'S FINDINGS:

RESEARCHER'S CONCLUSIONS:

REVIEWER'S NOTES AND COMMENTS:

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 282 LOCATION: NWREL Info. Center/ERIC MF

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Medley, D.M. Teacher competence and teacher effectiveness. A review of process-product research. Washington, D.C.: American Association of Colleges for Teacher Education, August 1977. (ERIC/EDRS No. ED 143 629)

DESCRIPTORS: Direct Instruction, Class Organization

SHORT TITLE: Medley, 1977, Teacher Competence and Effectiveness

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE X DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 4 [5] (Strong)

BRIEF DISCUSSION OF RATING:

This is a very thoroughgoing review and the findings are clearly presented. Tabular displays make it possible to identify the sources for each category of findings.

SYNOPSIS:

This report analyzes and synthesizes the results of 289 studies which investigated different aspects of teacher competence and teacher effectiveness. The author describes the review process utilized, pointing out that he excluded from his analysis all writings which were not the products of original research, which were reviews, or which were theory or opinion papers. "The remaining 289 items were examined for empirically obtained relationships between how a teacher behaves and how much the pupils learn from him or her, commonly called process-product relationships."

ITEM NUMBER: 282 SHORT TITLE: Medley, 1977, Teacher Competence and Effectiveness

RESEARCHER'S FINDINGS:

No fewer than 613 relationships are displayed in a series of tables. These are then synthesized by the reviewer into statements about effective teaching practices. Selected findings include:

Those teachers whose students performed the highest on achievement measures also had students with the most positive self-concepts and attitudes toward school.

Effective teachers of low SES primary children engage their students in more lesson-related activities than do less effective teachers. These teachers engage in more direct, interactive instruction and work with the whole class more. They ask more low-level questions and provide more feedback. Effective teachers have less deviant or disruptive behavior in their classes. Effective teaching behaviors for higher SES students are substantially the same, though more higher level questions are asked and less individual attention is given.

In the upper elementary grades effective teachers (compared to less effective teachers) talk more, keep pupils on task more, and are less permissive. They ask lower cognitive questions, use more supplementary materials and permit more student independence.

The author points out that the studies of the primary level are much more numerous than those at the upper elementary levels.

RESEARCHER'S CONCLUSIONS:

"...where sufficient effort and resources have been applied to the study of teacher effectiveness, useful and dependable findings have emerged..."

REVIEWER'S NOTES AND COMMENTS:

An extensive bibliography accompanies this report; this bibliography may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 283 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Leo, Y.M. & Sahraie, L. Improving teaching through the practical application of research. Kappa Delta Pi Record, 1981, 17 (4), 117-118; 116.

DESCRIPTORS: Direct Instruction, Class Organization

SHORT TITLE: Leo & Sahraie, 1981, Improving Teaching

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE ___ SECONDARY SOURCE X DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

Detail on the literature reviewed is not provided, but this is nevertheless a good summary and consistent with the findings of other such efforts.

SYNOPSIS:

This article describes the content of and development process for a slide/tape presentation intended to acquaint school staffs with the classroom management and instructional strategies which research has shown to be most effective in promoting student achievement. The article includes a listing of these strategies and practices as revealed by a research review conducted by the authors. Research reports were retrieved from the files of the Office of Research and Evaluation at the Austin Independent School District and the Research and Development Center for Teacher Education at the University of Texas.

ITEM NUMBER: 283 SHORT TITLE: Leo & Sahraie, 1981, Improving Teaching

RESEARCHER'S FINDINGS:

Behaviors which research had confirmed as being critical to successful classroom management procedures for low SES students included: (1) provision of interesting and appropriate learning tasks; (2) presentation of learning in "small and redundant chunks"; (3) increase of time-on-task; (4) continuous monitoring of the classroom; (5) provision of a "signal system" for transitions; (6) maintenance of a group focus in the classroom; (7) avoidance of "tunnel vision" on just a few students; and (8) practice of "crowd control" so as to manage large numbers of students.

Under teaching methods, specific teacher behaviors which research confirmed as successful were: (1) utilization of a "direct instruction" method; (2) provision of sufficient time for mastery of each learning "plateau"; (3) overteaching for overlearning; (4) teaching of groups of 8 or more from one-third to one-half of the time; (5) asking questions, getting pupil responses and reacting to these responses; (6) attempting to get a response from each child; (7) giving of immediate corrective feedback; (8) showing of encouragement and patience in feedback; (9) use of sustaining feedback, which involves the teacher staying with the student and rewarding/simplifying the question until the student succeeds; (10) use of specific praise and criticism; (11) frequent checking of student comprehension; and (12) placement of instructions on the board.

RESEARCHER'S CONCLUSIONS:

Concluding statements have to do with the utility of training materials based on the above practices.

REVIEWER'S NOTES AND COMMENTS:

A copy of the article may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 284 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Sorge, D.H., & Kline, C.E. Verbal behavior of college instructors and attendant effect upon student attitudes and achievement. College Student Journal, 1973, 7 (4), 24-29.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Sorge & Kline, 1973, College Instructor Behavior

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT ___ IRRELEVANT _X_ FOR PRESENT PURPOSE

PRIMARY SOURCE _X_ SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) [1] 2 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This study was methodologically odd and led to speculation about an as-yet-undetected "personality factor."

SYNOPSIS:

After citing previous research indicating that indirect teaching styles on the part of college instructors have a positive relationship to student achievement and attitude, the authors report the procedures for and results from their own inquiry into this matter. Ten graduate students were divided into two groups, and each was observed and rated as to how direct* or indirect* his or her teaching style was. Observations took place in the context of each graduate student's teaching behavior with undergraduate elementary education majors. Half the graduate students were given periodic feedback and half were not. The 450 students receiving instruction completed three attitude scales and took an achievement test.

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*Indirect verbal behaviors included the following: accepts feelings, praises or encourages, accepts or uses ideas of students, asks questions. Direct verbal behaviors included: lecturing, giving directions, criticizing or justifying authority.

ITEM NUMBER: 284 SHORT TITLE: Sorge & Kline, 1973, College Instructor Behavior

RESEARCHER'S FINDINGS:

The researchers found that (1) the amount of indirect teaching is not a sufficient factor for predicting attitude of college students toward instructor or subject; and (2) students made greater achievement gains when taught with an indirect teaching style than with a direct teaching style.

RESEARCHER'S CONCLUSIONS:

The findings are restated in the form of conclusions.

REVIEWER'S NOTES AND COMMENTS:

None.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 285 LOCATION: Project Files

REVIEWER: K. Cotton DATE REVIEWED: February 1982

CITATION: Glenn, A.D., & Ellis, A.K. Direct and indirect methods of teaching problem solving to elementary school children. Social Education, 1982, 46, (2), 134-136.

DESCRIPTORS: Direct Instruction

SHORT TITLE: Glenn & Ellis, 1982, Direct vs. Indirect Teaching

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This study was well-designed and conducted, and convincingly demonstrates the superiority of direct instruction in problem solving skills.

SYNOPSIS:

In this study direct and indirect instructional methods were compared as to their efficacy in fostering systematic problem solving skills among students. Fifty-five students in grades 3 and 4 were pretested to determine whether their problem solving approaches were "stimulus bound" (limited to the data available in the problem as presented) or "stimulus free" (importing data from beyond those available from the problem itself). Students were then randomly assigned to two treatment conditions. Group 1 received direct, systematic instruction in problem solving steps and guided practice in applying these to "real life" problems. Group 2 students were instructed via a "guided-discovery" approach, in which they were to focus on analyzing a problem and discover for themselves the ordered steps to follow. Instruction took place for one hour per day for three days, after which students were tested on their understanding and application of problem solving steps. The instrument used revealed whether the students' approach was random or systematic.

ITEM NUMBER: 285 SHORT TITLE: Glenn & Ellis, 1982, Direct vs. Indirect Teaching

RESEARCHER'S FINDINGS:

The direct method of instruction led to a more systematic following of the model, as determined by the researcher's analysis. Sixty-three percent of the students who were taught by the direct method followed the steps in the problem solving model more closely than did the students in Group 2. Only 18 percent of the Group 2 students followed the model.

"The direct method of instruction had such an impact on the students that, regardless of their type of classification for thinking (stimulus-free or stimulus-bound), they tended to follow a more systematic method of solving a problem."

RESEARCHER'S CONCLUSIONS:

"The findings of this small pilot study suggest that if one wants to teach students to follow a linear problem-solving model, the most effective instructional strategy is the direct, explicit method."

REVIEWER'S NOTES AND COMMENTS:

A copy of the report may be found in the Direct Instruction backup file.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 286 LOCATION: NWREL Info. Center/Periodicals

REVIEWER: K. Cotton DATE REVIEWED: March 1982

CITATION: House, E.R., Glass, G.V., McLean, L.D., & Walker, D.F. No simple answer: Critique of the Follow Through evaluation. Harvard Educational Review, 1978, 48, 128-160.

DESCRIPTORS: Direct Instruction

SHORT TITLE: House et al., 1978, Follow Through Critique

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS ___

RELEVANT X IRRELEVANT ___ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE ___ DISSERTATION ABSTRACT ___

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 [4] 5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a carefully executed analysis, which identified many of the problems associated with large-scale evaluations of several non-comparable programs and data collection methods.

SYNOPSIS:

This is a report of a review conducted by a panel assembled at the request and expense of the Ford Foundation to re-analyze the evaluation of Follow Through carried out by Abt Associates. The Abt evaluation had indicated that the Follow Through program had been quite successful, and especially that "models that emphasize basic skills succeeded better that other models in helping children gain thse skills." Because a great deal of money had been expended on the Follow Through program and its evaluation, and becuase "extravagant" claims had been made for these basic skills-oriented models (including the University of Oregon Direct Instruction Model), it was decided that a third-party review was needed as a check on the original findings. Accordingly, the Ford Foundation awarded a grant to the Center for Instructional Research and Curriculum Evaluation at the University of Illinois to conduct the review. Project Director, Ernest House, selected other panel members and the review was conducted and published.

ITEM NUMBER: 286 SHORT TITLE: House, et al., 1978, Follow Through Critique

RESEARCHER'S FINDINGS:

Reanalysis of the data gathering methods and the data themselves led the panel to a number of findings which differed from those published by Abt Associates. The panel identified such problems as: uncertainty of the classification system used to categorize the different Follow Through models; differences between a program's stated goals/objectives and its actual practices and outcomes; inconsistencies in and unreliability of methods used for assessing outcomes; and numerous problems in data analysis procedures. The combination of these problems led the panel to voice numerous doubts about the findings presented by Abt and, therefore, about the efficacy of the programs evaluated.

RESEARCHER'S CONCLUSIONS:

"... The Follow Through evaluation does not demonstrate that models emphasizing basic skills are superior to other models... The coverage of outcome domains is so poor that no judgment of best model can legitimately be made, no matter how large the difference in test scores..."

A number of recommendations are made for future large-scale evaluations and reviews of them.

REVIEWER'S NOTES AND COMMENTS:

A copy of the report may be found in the Direct Instruction backup file. See Item No. 250, which offers a refutation of the panel's review as it bears on the Direct Instruction model.